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"It Comes with the Job": A Mixed Methods Study on Teacher Mental Health, the School Environment, and School Leader Practices

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"IT COMES WITH THE JOB": A MIXED METHODS STUDY ON TEACHER MENTAL HEALTH, THE SCHOOL ENVIRONMENT, AND SCHOOL LEADER PRACTICES

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by
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ABSTRACT

Teacher mental health is situated between multiple factors in the education system. At one end, teacher mental health is influenced by the school environment and the practices of their school leaders. Meaning, the quality of a school's environment and how a school leader develops that environment as either positive or negative can affect teacher experiences of well-being or distress. On the other end, teacher mental health can influence instruction, learning environments, and their intentions to move. Given that the mental health of teachers can be advantageously or adversely influenced by their surrounding school environment and leader, it is necessary to examine these influences because of the consequential implications teacher mental health has on school outcome measures. Despite the significance, little to no research explores these variables simultaneously, making it difficult to comprehensively inform school leaders' practice in developing school environments that promote teacher mental health.

The purpose of this three article dissertation was to study the relationship between teacher mental health, the school environment, and school leader practices. First, in Chapter 2, I sought to survey previous scholarship on the aforementioned topics and develop a conceptual framework for exploring this relationship. Second, in Chapter 3, I sought to determine the nature of the relationship, in direction and strength, between conditions of the school environment and teacher mental health as indicated by well-being and distress. Lastly, in Chapter 4, I sought to understand how school leader practices are related to teachers' perceptions of the school environment and how those

practices related to the school environment explain reported levels of teacher mental health.

Using an ecological systems theory approach and mixed methods research design, I integrated quantitative and qualitative data to understand how the school environment directly relates to elements of teacher mental health as well as how school leader practices contribute to teachers' perceptions of the school environment and explain reported levels of teacher mental health. The findings of this dissertation uncover specific dimensions within the school environment that most influence teacher mental health. Furthermore, the findings provide detailed leadership practices associated with building open, healthy, and positive school environments that benefit teachers with regard to their mental health. The findings offer educational leaders, at the school and district level, policymakers, and educational researchers a greater understanding of how the school environment can serve as a tool for teacher mental health promotion, teacher retention, school improvement, and increased student academic achievement.

DEDICATION

This dissertation is dedicated to those…

enlisted in the educational revolution;

on the frontlines of education- pouring into students daily, even on the days when their cup may be cracked, broken, or all out empty;

educators and leaders that believe in the transformational power of putting people at the center of their work humanely, ethically, and equitably.

May its findings help to create better, restorative school environments that allow all who enter to thrive.

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Last but certainly not least, I would like to thank my wife, Riley. Our life together has been a series of grand and misadventures. Thank you for seeing me through this grand adventure, for knowing it needed to happen, and being such a wonderful support system through it all. Here's to our next adventure, *together*.

TABLE OF CONTENTS

Page

Table of Contents (Continued)

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

The instructional day had come to a peaceful close, yet seated from my office desk I could see her down the hall making a frantic beeline towards me as she tried to fight back her tears. With a simple nod I acknowledged her disposition as she stood in the doorway of my bricked in, yellow corner office, invited her to take a seat and close the door behind her. *One Mississippi*. *Two Mississippi*. *Three*- "I cannot do this anymore!" she exclaimed to break the silence. As a second year school counselor, speaking with a highly regarded veteran teacher, I had no idea what she meant by this. She wiped her tears, took one deep inhale and exhale, then proceeded to share all the details of her career that led to this vulnerable moment: a crossroad between a career she dreamed about as a young girl and her mature, present-day-self trying to emotionally, physically, and professionally stay afloat. Each year thereafter in my role as a school counselor the conversations with my colleagues surrounding job dissatisfaction, exposure to low school morale, and extremely high levels of stress grew more and more frequent. Consequently, each year I watched as my colleagues submitted their letters of resignation in search of balance, fulfillment, satisfaction, rest, and well-being.

Teacher turnover is a growing problem in the education profession. Nationally, the rate of teacher turnover reached a high of 20% since the term revolving door was coined to characterize teacher turnover in the 1980s (Ingersoll, 2001; Ingersoll & Merrill, 2012; Ingersoll et al., 2018). The idea of a revolving door produces imagery of a hotel lobby where individuals pour in yet at the same time as the door spins open to welcome

newcomers, it continues to open the door for those on their way out as well. Teacher turnover occurs in multiple forms. Some teachers simply move schools within their respective school districts, while others move to entirely new school districts within the state. This type of turnover is referred to as migration (Boe et al., 2008). Other teachers leave the profession altogether, which is referred to as attrition (Boe et al., 2008).

Turnover impacts student instruction, school stability, and district finances. Teacher turnover is much higher for teachers in their first through fifth years in the profession (Boe et al., 2008; Ingersoll et al., 2018). On par with national averages, the state of South Carolina consistently loses approximately 35% of teachers to migration and attrition within their first five years (Center for Educator Recruitment, Retention and Advancement, 2019). According to the Center for Educator Recruitment, Retention and Advancement's (CERRA) Supply and Demand Annual Report (2019), 7,300 teachers did not return to their position in the 2017-18 school year, which is a 10% increase compared to the 2016-17 school year. The 7,000 plus teacher departures in South Carolina left over 600 vacant teaching positions at the start of the subsequent school year (CERRA, 2019). This void and shuffling of teachers makes it difficult to stabilize the instructional and cultural environments in schools, but it begs the question of why are teachers leaving?

Teachers choose to leave their position for a variety of reasons. In South Carolina, nearly 20% of teacher departures can be attributed to personal choice from familial obligations or transitions to school related administrative issues (CERRA, 2019). Early scholars attributed teacher departure to characteristics involving the teacher (Ingersoll, 2001). However, it was not until the 1980's, through the work of Ingersoll (2001), that

educational researchers began to explore alternative reasons for teacher turnover, like issues within the school organization.

In some cases, teacher movement can be reduced by maintaining school environments that are healthy and of good quality for teachers. The school environment significantly affects the behaviors of teachers (Tubbs & Gardener, 2008). Quality school environments foster a sense of trust and collegiality between school leaders and staff (Hoy et al., 1992). Additionally, there is open communication flowing both top down and bottom up within the organization (Hoy & Tarter, 1992). School leaders that are described as supportive, collegial, and direct in expectation elicit more job satisfaction from their teachers, which in turn decreases the likelihood of teacher movement (Griffith, 2004). The aforementioned practices of school leaders create the conditions for a positive school environment, one in which teachers are willing to remain because they find satisfaction in their current teaching setting.

School environments characterized by negativity affect the well-being of teachers as well as the instructional environment for students. A school environment with a heavy emphasis on student standardized testing measures creates an atmosphere filled with extreme pressure for teachers (von der Embse et al., 2016). The pressure associated with testing accountability measures incites significant levels of anxiety in teachers (von der Embse et al., 2016). Teachers experiencing anxiety or depression, as specified in the Diagnostic and Statistical Manual of Mental Health Disorder-V, have decreased end of the year student achievement scores (McLean & Connor, 2015). In addition to low performance on mathematics and reading achievement (McLean & Connor, 2018),

students are typically exposed to more chaotic classroom learning environments when their teacher is experiencing symptoms of depression or anxiety (Herman et al., 2018).

Teacher frustration and burnout increase in negative school environments (Carpenter, 2015; Richards et al., 2018). School leaders sculpt the school environment with their practices (Peterson & Deal, 2011). Withdrawn school leaders lacking in relationships, trust, and collegiality among staff breed hostile school environments whereby teachers tend to isolate themselves from their colleagues and leaders (Carpenter, 2015). Over time continued isolation and hostility in the work environment negatively influences teacher behaviors and affect (Carpenter, 2015). Burnout is the state of exhaustion physically, mentally, and emotionally (Schonfeld & Bianchi, 2016; Sorenson, 2007). Richard and colleagues (2018) found teachers had higher rates of burnout when their school environment was perceived as "combative" and "constraining" (p. 776). Additionally, teachers with burnout noted the negative impacts their burnout had on their physical health (Richards et al., 2018).

Continued teacher experiences of declining health and well-being compounded by excessive stress due to negative, unhealthy school environments may lead to an influx of teacher turnover compared to current rates. Buchanan (2010) interviewed 21 former teachers regarding their decision to leave the profession. Each participant attributed their departure to the condition of their school environment, constant dissatisfaction, declining physical health and well-being, to the point, one participant expressed their time as a teacher left them feeling "despondent." (Buchanan, 2010). There is no room in education

for discouraged, hopeless, and disheartened teachers because the future livelihood of too many is at stake.

School leaders play a pivotal role in the development of school environments through the implementation of daily practices and policies (Brown & Wynn, 2009; Gray et al., 2017). As the practices of school leaders are connected to the school environment, researchers have also found a connection between teacher emotional exhaustion, stress, job satisfaction, well-being, organizational commitment, and burnout to a school's environment (Aldridge & Fraser, 2016; Grayson & Alverez, 2008; Ingersoll, 2001). From these perspectives, an interconnectedness between leaders, environments, and teacher affect and mental health. Despite the significance, there is limited availability of scholarly literature examining teacher mental health with regard to the school environment in the United States. Within the last five years there has been an increase in published literature on teacher mental health, however, scholars have not yet addressed the role of educational leaders in promoting teacher mental health through supportive practices when developing the school environment.

Theoretical Framework

Throughout my three article dissertation, I utilized multiple theoretical models to help frame my lines of inquiry: (a) examining current scholarship that addressed the role of school principal practices in developing the school environment and their influence on teacher mental health; (b) determining the relationship between the school environment and teacher well-being; (c) determining the relationship between the school environment and teacher distress; and (d) explaining reported levels of teacher well-being and distress

based on the practices of principals that shape the school environment. I drew from Martin Seligman's (2011) theory of well-being to conceptualize well-being in teachers. While teachers and their well-being are physically set in a school building, my research specifically examined the interaction between teachers and the quality of their school environment. I integrated Hoy's (1990) organizational climate theory and Moos' (1973) dimensions of human environments to define and guide my understanding of the school environment which houses teachers daily throughout the academic work week. Ecological theory (Bronfenbrenner, 1977) was the fourth theory I relied on to provide insight into how a set of systems surrounding an individual work together to affect their development.

The tenets of Seligman's (2011) well-being theory provided a general definition of individual well-being as well as an opportunity to identify specific examples of well-being in the school setting for teachers. Well-being theory is comprised of five elements: positive emotion, engagement, positive relationships, meaning, and achievement (Seligman, 2011). Together these five elements form the acronym PERMA (Seligman, 2011). Positive emotion can be described as the hedonic or pleasurable states typically associated with happiness, satisfaction, joy, and or warmth (Seligman, 2011). Engagement pertains to the level of interest a person experiences throughout the duration of an activity and full investment of their time, energy, and self to a particular activity. Seligman (2011) stated that often individuals retrospectively assess their levels of engagement and experience feelings of losing track of time or losing themselves in an activity as they have entered a state of flow. The next element in PERMA is positive

relationships: a connection to others and forming lasting, healthy bonds with people (Seligman, 2011). The element meaning refers to an individual's identification and belongingness to a group as well as the idea their purpose is to serve something bigger than themselves (Seligman, 2011). Finally, accomplishment directly relates to an individual achieving a goal or finding success either professionally or personally.

Teachers work in a complex and multilayered organization that is influenced by internal and external forces. Internally, a school organization is influenced by the behaviors, attitudes, and relationships held by staff members. External forces that influence the school organization includes community stakeholders, district office personnel, as well as state and federal mandates. To best understand well-being in teachers, the multiple influential layers found in a teacher's environment need to be jointly investigated to witness the effects and interactions between systems (Bronfenbrenner, 1977).

The ecological environment is arranged topologically with structures nested within one another (Bronfenbrenner, 1977). In his initial phase of Ecological Systems Theory (EST), Urie Bronfenbrenner (1977) identified the microsystem, mesosystem, exosystem, and macrosystem as the four systems that influence an individual's development. Teacher well-being is nested within four external systems: the classroom, the school environment; school leader practices; as well as societal and educational structures in place. The microsystem is the first and most immediate ecological system to the teacher. In the school setting this is a teacher's classroom. It is important to identify the classroom as the microsystem because teachers often have increased opportunities to

control the classroom environment and dynamics as the classroom leader (Putney & Broughton, 2011).

Moving outward in the set of systems, Bronfenbrenner (1977) described the mesosystem as an environment where many social interactions and relationships take place to shape an individual. In this study, the school environment was considered the mesosystem. More specifically, the quality of the school environment experienced by teachers which affects their behavior and is based on their collective perceptions of behaviors in the school (Hoy, 1990). In conjunction with organizational climate theory, Moos's (1973) dimensions of human environments adds to the interpersonal nature of the school environment by addressing the psychosocial dimensions of an organization experienced by its members. The next system in the study was the practices of the school leader. Grissom (2011) found having an effective school leader can completely offset the disadvantages found in a school, work environment. At this system, teachers are not directly involved in the execution of school leader practices although they may subsequently be affected by what actions take place within this system. For this reason, the practices of the school leader served as the exosystem throughout this study. Over time Bronfenbrenner revised the systems of EST, even adding a chronosystem, but at this time I must state this research is grounded in the initial, four system phase of his work.

Research Design Overview

The purpose of this mixed methods study was to first understand how teacher mental health is influenced by the school environment shaped by school leader practices. The second purpose was to investigate the relationship between the quality of the school

environment and teacher mental health. The third purpose was to understand how school leader practices that shape the school environment explain reported levels of teacher mental health. I organized my dissertation into three independent manuscripts in the form of one conceptual literature review, one quantitative study, and one explanatory qualitative study. Although each manuscript is written to be consumed by audience members independently, all three articles share a common thread: teacher mental health, the school environment, and school leader practices.

In the first manuscript titled, School Leaders Cultivating School Environments Protective of Teacher Mental Health: A Review of the Literature, I sought to identify school leader practices that help to create school environments that preserve teacher well-being rather than serve as a detriment to teachers. I took a systematic literature review approach to first establish a pool of literature resources that addressed teacher mental health, the school environment, and school leader practices. The use of a systematic literature review approach allowed me to develop inclusion and exclusion criteria to increase relevance towards the intended population of teachers, the public school setting, and applied theoretical framework. Furthermore, the inclusion and exclusion criteria trimmed a probable 222 resources down to 31 relevant literature resources.

In manuscript one, I pursued an understanding of current literature available on teacher mental health in relation to the school environment and school leader practices simultaneously. Upon review, I found there was literature on teacher mental health, the school environment, and school leader practices; yet, very few studies examined all three variables at the same time. Moreover, teacher mental health was rarely conceptualized as

a holistic construct, similar to Seligman's (2011) PERMA model. Instead, the literature on teacher mental health was deconstructed into singular elements such as teacher satisfaction, teacher engagement, collegiality, and or trust. Additionally, teacher mental health was either examined in relation to the quality of the school environment or school leader practices. I, therefore, made an argument for why all three variables need to be jointly investigated as all three variables are interconnected.

Following the first manuscript, I employed a quantitative methodological approach to investigate the relationship between the quality of the school environment and teacher mental health. In the second manuscript titled, The School Environment and Teacher Mental Health: A Correlational Investigation, I surveyed K-12 public school teachers across South Carolina school districts. Volunteer teacher participants were electronically provided three surveys to report on the quality of school environment, the independent variable, and their level of mental health, measured by well-being and distress, the dependent variables.

To assess the independent variable, the school environment, teachers were asked to respond to the Revised School-Level Environment Questionnaire. In 1983, Rentoul and Fraser developed and validated the original School-Level Environment Questionnaire (SLEQ) based on the work of Moo's (1973) human environment theory. The 56-item questionnaire measured teachers' perceptions of the psychosocial dimensions of the school environment (Fisher & Fraser, 1990; Rentoul & Fraser, 1983). Later, Johnson and colleagues (2007) revised and validated a shortened version of the SLEQ with only 21 questions known as the R-SLEQ. The R-SLEQ was successfully used in a study

conducted by Aldridge and Fraser (2016) on teacher satisfaction, self-efficacy, and the school environment.

To assess dependent variables, teacher well-being and distress, teachers were asked to respond to the Workplace PERMA Profiler developed by Kern and colleagues (2014) as well as the Depression Anxiety Stress Scales-21 (DASS-21) validated by Crawford and Henry (2005). The Workplace PERMA Profiler is an adapted profiler based on the PERMA Profiler. The Workplace PERMA Profiler addresses the five pillars of well-being as defined by Seligman (2011), and situates assessment questions to that of the respondent's work setting (Kern et al., 2014). Originally, the Depression Anxiety Stress Scales (DASS) was developed by Lovibond and Lovibond (1995) as a 42-question survey to assess depression, anxiety, and stress. However, Henry and Crawford (2005) investigated the construct validity of a shortened 21-question version of the DASS. The DASS-21 showed adequate reliability and construct validity (Henry & Crawford, 2005). Moreover, Crawford and Henry (2003) found the DASS-21 to possess impressive psychometric properties when drawn from a large general, non-clinical adult sample population.

After participants completed study surveys, I employed structural equation modeling to establish the relationship between dimensions of the school environment (collaboration, student relationships, decision making, resources, and innovation) and elements of teacher well-being (positive emotion, engagement, relationships, meaning, and achievement). I also used structural equation modeling to determine the relationship between dimensions of the school environment and indicators of teacher distress

(depression, anxiety, or stress). Furthermore, I used path analysis to identify the strongest pathways to overall teacher mental health.

In manuscript three titled, School Leader Practices Shaping the School Environment and Teacher Mental Health: An Explanatory Multi-Case Study, I illustrate how school leader practices that shape the school environment explain reported levels of teacher mental health. I took a qualitative case study approach to answer the research question: how do school leader practices that shape the school environment explain reported levels of teacher mental health?

I utilized data from manuscript two to purposefully select (Creswell & Plano Clark, 2018) four teachers to participate in the explanatory case study. Teacher participants were critical cases invited to participate because their quantitative data corroborated study hypotheses: (a) teachers report higher levels of well-being in school environments perceived as positive and (b) teachers report higher levels of distress in school environments perceived as negative. After semi-structured interviews with teachers, I conducted iterative cycles of coding to determine emergent thematic patterns (Miles et al., 2014). I then used explanation building to explain teacher reports of mental health based on characteristics of the school environment created by school leader practices (Yin, 2018).

Delimitations and Limitations

An important delimitation to consider with this study is the setting. In this study, I only surveyed and interviewed teachers who volunteered to participate as identified South Carolina educators. Despite a wealth of literature on teacher turnover and churn

found in parochial and private school settings (Atteberry et al., 2017), the present study focused on teachers serving in the public education sector. Additionally, the limited availability of research on teacher well-being outside of child-development centers and pre-kindergarten classrooms prompted research in kindergarten through 12th grade settings.

A second study delimitation involved study participants. Although the school building is comprised of certified and non-certified staff members, only certified teachers participated in the completion of study surveys and or follow-up interviews. While an investigation into the well-being of paraprofessionals, teacher's aides, and administrative assistants may equally yield fascinating results, the present study does not include non-certified staff members. It does, however, include speech therapists, professional school counselors, media specialists, and academic interventionists as certified teaching staff members.

At the conclusion of the research, three limitations to the study were present. The first limitation involved use of participant self-reports. Participants were asked to self-report on the Workplace PERMA Profiler and DASS, therefore there is a strong likelihood reports of teacher well-being and distress could be inflated or deflated. The inflation or deflation is also likely present on reports of the quality of the school environment as participants reported on the R-SLEQ based on their perceptions of their respective school environment. A second limitation involved participants of the qualitative phase of research. Semi-structured interviews were conducted with teachers and no other members within their school environment such as the participant's school

leader. The final limitation involved generalizability of the research, because this research was conducted in one state within the United States and not with a sample representative of the South Carolina teaching force, the results cannot be generalized to K-12 settings across the state or nation as a whole.

Significance

The state of mental health for any teacher transcends personal responsibility. Teacher mental health is impactful in nature, especially with regard to the openness of a school-work environment, teacher retention rates, and student learning outcomes. This study is timely and will provide detailed implications for educational stakeholders. There is a current movement for educational leaders and policy makers to define, understand, and protect the mental health of teachers. This study will answer questions surrounding the state of teacher mental health as well as its connection to the school environment and school leaders in a United States context. The results of this study will document the levels of teacher mental health while also pinpointing targeted areas for improvement. Additionally, this research will outline the influential relationship between the school environment and teacher mental health. With this information, scholars, educational leaders, and policy makers will gain an awareness of how different characterizations of the school environment positively or negatively sway the mental health of teachers.

An understanding of this relationship will be beneficial for school leaders charged with developing their school environment. Knowledge of such an influential relationship will support school leaders in their efforts to retain teachers as well as keep them psychosocially fit for their instructional duties. Given that the mental health of teachers in

terms of satisfaction, commitment, and trust all raise student achievement (Garcia Torres, 2019; Griffith, 2004; Price, 2012; Shen et al., 2012; Tschannen-Moran & Gareis, 2015), school leaders will want to know how to create school environments conducive of teacher mental health preservation and promotion.

District leaders equipped with an understanding of the connection between school leaders, the school environment, and teacher mental health will also benefit from the results of this study. As a result of the study, it would be beneficial for district leaders to critically inspect school leader placements. Much of this research focuses on the school leader's role in creating optimal school environments, therefore as a district leader a responsive measure to this study would be to ensure school leaders are capable of creating such school environments each school year. Furthermore, in the event a school leader struggles to maintain a high quality school environment, district leaders could implement supportive measures for identified school leaders to grow in their ability.

Results of this study may be helpful to policy makers. As more policies are being developed to address the climate and safety of school environments for students, this research may assist in furthering policies for teachers in this regard. The development of policies written to directly foster teacher mental health would be an act that adds capital value for individuals in a highly service related field. Finally, this study will likely immediately add scholarly literature in the areas of teacher mental health and educational leadership. At this time, this study is one of few to take a mixed methods approach to investigate teacher mental health while using the Workplace PERMA Profiler and DASS with a population of teachers.

Summary

The purpose of this mixed methods study was to understand teacher mental health in relation to the quality of school environment and school leader practices. In Chapter 2, I identified practices of school leaders that support the creation of an open, healthy, and positive school environment that serves as a protective factor for teacher mental health. Following the first manuscript, Chapter 3, or manuscript two, investigated the relationship between the quality of the school environment and teacher mental health. In the third manuscript, or Chapter 4, I took a qualitative approach to understand how the practices of school leaders that develop the school environment explained reported levels of teacher mental health. Finally, in Chapter 5, I integrated all the content and findings from across the three manuscripts to succinctly provide implications for school leaders as well as future lines of inquiry for educational researchers.

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CHAPTER TWO

SCHOOL LEADERS CULTIVATING SCHOOL ENVIRONMENTS PROTECTIVE OF TEACHER MENTAL HEALTH: A REVIEW OF THE LITERATURE

Abstract

The mental health of teachers is affected by the quality of the school environment in which they work. Moreover, there is an influential relationship between school leader practices and the nature of the school environment. The purpose of this paper is to examine school leader behaviors that help to create school environments that preserve and protect teacher mental health rather than serve as detrimental environments. A search protocol with inclusion and exclusion criteria was developed to find resources through leading academic search platforms such as: Academic Search Premier, ERIC, PSYCH Info, and PSYCH Articles. Little to no research was available on teacher mental health, yet there were studies that addressed portions of teacher well-being. This paper adds to literature on educational leadership, school environments, and teacher mental health by offering a holistic conceptualization of teacher well-being in alignment with Seligman's model of well-being. Additionally, I introduce a conceptual framework explicitly citing school leader practices found to develop school environments that benefit teacher mental health. Implications for educational leaders and recommendations for future educational research are provided.

Introduction

The rate of teacher turnover continues to rise in the United States. In the 1994-95 school year the rate was 14.3%, and in the 2010-11 school year the rate of teacher turnover rose to 20% (Ingersoll, 2001; Ingersoll & Merrill, 2012). Teacher turnover primarily involves two forms of movement: teacher attrition and teacher migration. Teacher attrition outlined by Boe et al. (2008) refers to teachers who altogether left the teaching profession to pursue other careers outside of education, whereas, teacher migration is used to describe teachers continuing employment in the teaching profession but have moved from one school to another the following school year. Teacher attrition has garnered national attention as concerns begin to intensify over beginning teachers exiting the profession well before their fifth year and the growing teacher shortage. Based on 2000 to 2001data from the national Teacher Survey Follow-Up, the estimated rate of teachers leaving during their first three years was 25.5%, during their first four years was 32.0%, and during their first five years was 35.0% (Boe et al., 2008). The rate of teacher turnover is one of the highest occupational turnover rates compared to other occupations (Ingersoll, 2001; Ingersoll et al., 2018).

While the exodus of experienced teachers compounded by the shortage of teachers readily available to fill these vacant positions is creating a nationwide hardship on school districts, it also challenges school districts and leaders to reduce teacher migration and attrition by understanding the root causes. Research in the 1980s heavily concluded individual characteristics of teachers led to turnover, however, the results of Ingersoll (2001) countered this idea as he argued that teacher turnover was more

significantly attributed to contextual factors within the school such as organizational conditions and school characteristics. This finding refocused the cause of teacher movement from the demographics and experiences of teachers to the characteristics found within organizational environments instead.

Scholars continue to debate the characteristics of school organizations that lead to teacher movement. A meta-analysis conducted by Borman and Dowling (2008) generally suggested that there is a large number of environmental characteristics that are predictive of teacher attrition. Harris and Adams (2007) cited issues of salary and pensions, while Harrington (2001) cited a dysfunctional labor market for math and science teachers. Ingersoll (2001) named lack of support from administrators and lack of input or decision making power as the environmental characteristics that influence teacher movement. School leaders cannot control teacher movement attributed to the salary or a dysfunctional labor market, rather, school leaders are able to control the type organizational environment created by their leadership practices to minimize teacher movement.

Buchanan (2010) adopted a grounded theory approach to study the events surrounding 21 former teachers' decision to leave the profession and understand their previous work environments in comparison to their current environments. Many participants described their teaching experience as "draining", "relentless", or "exhausting" which left them feeling as though they were "adrift", "despondent", and overall "negative" (Buchanan, 2010, p. 5-6). This study began to touch on the declining mental health of ex-classroom teachers before they left the profession. One participant

discussed how the negative effects that stemmed from his teaching career caused poor health and a weakened family structure. The decline experienced in his life ultimately led to his departure from the profession. Although few participants considered returning to the teaching profession, some participants shared the positive impression school administrator support made in their time as a teacher (Buchanan, 2010).

Providing school-work environments that serve as protective factors for teacher mental health is not only a way to retain teachers, rather, protecting teacher mental health also becomes a way to preserve the academic livelihood of students in the kindergarten through 12th grade setting. Herman et al. (2018) found that teachers leading a well-adjusted classroom characterized by low stress, high coping, and high teacher self-efficacy was a rarity. Researchers developed teacher profiles based on their ability to cope, level of stress, and reported burnout. The profiles were then used to characterize their respective classroom as well-adjusted, high coping and low burnout, or low coping and high burnout. Only 7% of the classrooms were identified as well-adjusted, while the remaining 93% of the classrooms were characterized by high levels of stress (Herman et al., 2018). Furthermore, in terms of student behavior and academic achievement, students in the high stress, low coping classroom had the highest rates of student behavior problems and lowest performance outcome (Herman et al., 2018).

When teacher mental health is compromised and begins to manifest as burnout or depression, student achievement suffers. McLean and Connor (2015) investigated the association between teacher depressive symptoms and student academic performance. Teachers with more depressive symptoms were less likely to have maintained a high

quality learning environment. Students also exhibited weaker math achievement when taught by teachers with reportedly more depressive symptoms. Teachers reporting depressive symptoms adversely affected the instructional experience of students as well as their academic performance (McLean & Connor, 2015; McLean & Connor, 2018). Just as declining mental health and well-being shares a negative relationship with student outcomes, the inverse relationship holds true as well. The positive well-being of teachers can promote student achievement. Banerjee et al. (2017) found a one point increase in teacher job satisfaction is associated with a 1.58 point gain in first grade, a 3.42 point gain in third grade, and a 2.25 point gain in fifth grade reading achievement. Meaning, increased levels of teacher satisfaction is enough to increase student reading achievement in elementary students.

The status of a teacher's mental health is at the center of two critical points in education. At one end, teacher mental health is linked to the quality of the school environment in which they teach. At the other end, teacher mental health is linked to student achievement and teacher movement. Due to the influence the school environment has on teacher mental health and the subsequent influence teacher mental health has on student achievement as well as teacher movement, knowing how to create optimal school environments becomes a crucial task for school leaders.

The purpose of this paper is to examine school leader behaviors that help to create school environments that preserve and protect teacher mental health rather than serve as a detriment. Based on a systematic literature review I conducted, in this paper I discuss characteristics of the school environment and its influence on teacher mental health as

well as the influence of school leader practices on the school environment. I argue current literature on educational leaders, the school environment, as well as teacher mental health is topically disjointed; as much of the literature investigates educational leaders and the school environment or the school environment and portions of teacher mental rather than all three constructs at one time. Furthermore, there is little to no research utilizing a comprehensive conceptualization of teacher well-being. I rely on the work of Seligman's model of well-being to conceptualize a holistic framework for teacher well-being in the school setting. This paper will add to research in the following bodies of literature: educational leadership and administrative management, the school environment, teacher retention, and teacher mental health.

Methods

In order to write this literature review on teacher mental health as influenced by the school environment by way of school leader practices, I generated a list of search terms and search engines to find the most relevant research. I accessed the following 11 search engines: Academic Search Complete, Academic Search Premier, Ebook Academic Collection (EBSCO Host), eBook Collection, Education Full Text, Education Research Complete, ERIC, PSYCH Articles, Psychology and Behavioral Sciences Collection, PSCYH Info, and Social Sciences Full Text. Each search engine was filtered by peer reviewed, full text, and text in the English language. The year of publication was not used as a filter due to the limited availability of literature on teacher mental health. After filters were determined, I used a series of search terms and search phrases to begin creating a pool of resources. Initially, the search terms were broad and represented singular

constructs within the literature review: school leader practices, school policies, school environment, school climate, school culture, teacher well-being, teacher stress, teacher burnout, teacher mental health, teacher mental illness, teacher depression, and teacher anxiety. Because the school environment is a multifaceted construct often operationalized as either school climate or culture, all three search terms were included as not to miss any body of literature that may simultaneously address teacher mental health and well-being. After the initial phase of the search was complete, I conducted a second search phase cross-referencing search term constructs with other relative search terms (e.g., school leader practices*school environment and school climate*teacher stress). Upon the completion of both search phases, 222 articles were compiled for potential use in the present literature review.

Articles were briefly examined for inclusion or exclusion based on the title and details provided in the abstract. An article was included in the literature review if:

- Utilized theoretical framework from Bronfenbrenner's ecological systems theory and Hoy's organizational climate theory
- Examined well-being specific to teachers
- Investigated the relationship between school leadership and the school environment
- Participants were from a kindergarten through 12th grade setting

Furthermore, articles were excluded from the literature review if:

- The study was outside of the United States educational setting

- The constructs examined were outside of the scope of the current review (i.e., Physical Health Education, Student Centered)
- Set in a private or parochial school

One purpose of the systematic literature review I conducted was to determine the availability of research on teacher mental health in relation to school leader practices and the school environment within the United States; therefore I omitted studies outside of the United States to accurately present findings from this context. Furthermore, I was particularly interested in research on teacher mental health in the public school setting leading to the exclusion of research set in private or parochial schools. I removed any duplicate source from the original 222 references and discarded any resource that did not adhere to the inclusion and exclusion criteria. After applying the inclusion and exclusion criteria, 54 articles remained as well-suited resources for inclusion in the literature review. Ultimately, 31 articles were included in the final review as some of the articles printed from the list of 54 resources lacked relevance to the present examination. Thirteen articles were quantitative while the other 18 articles were qualitative. Each of the 31 articles were used as resources to define the school environment and teacher mental health as well as to identify practices of school leaders that build beneficial school environments towards teacher mental health. During the synthesis of research, I explore a division in the literature that emerged across the three research topics: teacher mental health, the school environment, and school leader practices.

The Complete State of Mental Health

Mental health is not the complete absence of psychopathology (Keyes, 2002). Instead, mental health is an indicator for the condition of an individual's life and livelihood (Keyes, 2007). In 2005, the World Health Organization (WHO) published their definition of mental health as, "A state of well-being in which the individual realizes his or her own abilities, can cope with normal stresses of life, can work productively and fruitfully, and is able to make contribution to his or her community" (WHO, 2005, p.2). As a condition, mental health includes the presence of positive, functional living for an individual. Keyes (2005) conceived mental health as a complete state whereby individuals are indeed free from psychopathology and are flourishing with high levels of well-being. Emotional well-being, psychological well-being, and social well-being are the three core components attributed to an individual's degree of mental health (Keyes, 2002). Although mental health and mental health disorders, or mental illness, are highly correlated constructs, they are two distinct phenomena (Keyes, 2005; Westerhof & Keyes, 2010). Because mental health and mental illness belong to two separate continuums (Keyes, 2007), in the forthcoming sections I discuss mental health defined by well-being as well as distress and mental health disorders in teachers separately.

Mental Health and Well-being

Teacher well-being is more than feeling well emotionally or physically. Instead, the idea of teacher well-being is an overall self-assessed measure that considers the quality of several affective constructs. Seligman (2011) integrates components of hedonia (the experiences of positives emotional states and satisfaction of desires) and eudaimonia

(the presence of meaning and development of one's potential) into one model. The model of well-being is comprised of positive emotion (feeling good), engagement (finding flow), relationships (authentic connections), meaning (purposeful existence), and accomplishment (a sense of achievement) (Seligman, 2011). Together, the five constructs form the acronym PERMA.

The structure of well-being as posited by Seligman (2011) has multiple benefits for individuals as well as researchers. Well-being as a general construct along with its subconstructs maintains a dualistic identity in that each element can be empirically assessed on an individual basis, however, in order for each of the constructs or elements to contribute to well-being overall, they must all work in conjunction with one another (Seligman, 2011). Of note, not one element defines well-being without the contributions of the other elements; as no singular measure defines well-being completely or operationally because several elements contribute to the construct itself (Seligman, 2011). As well-being is multidimensional in nature, there is both practical and theoretical value in a comprehensive profile rather than a single "overall well-being" score (Kern et al., 2014, p. 507). A multidimensional construct of well-being allows for a tailored approach to increasing well-being (Kern et al., 2014). For example, if a teacher reports high scores of positive emotion, meaning, and achievement but reports low scores of engagement and relationships, school leaders as well as the teacher can initiate targeted actions to increase scores in the lower elements.

Seligman (2018) demonstrated that PERMA satisfies the need to observe the interaction between elements as each element serves another element in the model.

Seligman (2011) posited the PERMA model of well-being is like that of a meta-construct that should not be deconstructed and investigated individually by each construct. Moreover, each element works together for the benefit of an individual to provide a complete sense of well-being.

With well-being research appearing in scholarship within the last decade, it is difficult to truly understand how well-being manifests in the school setting for educational leaders and teachers. For the purpose of this paper, I drew from Seligman's PERMA model to conceptualize well-being in the educational setting for teachers. Teacher satisfaction within their profession and school site served as the well-being element positive emotion from the PERMA model. Engagement was defined as a teacher's experiences of commitment and participation within the school organization. This was qualified as how dedicated a teacher is to the attainment of collective school goals and the academic goals of students. Perceptions of trust and collegiality between teachers, among all staff, as well as between teachers and school leadership will categorically fall under the relationship element of PERMA. Meaning was viewed as how rewarding teachers find their role to be within their school and within the lives of their students. Finally, achievement was reflective of the informal or formal opportunities for professional growth and success at the school level. As seen in Table 1, extended examples within the school environment are provided as experienced by teachers in relation to the PERMA model of well-being.

Table 1

PERMA Elements in the School Environment

Elements of Seligman (2011) PERMA Model	Examples in the School Environment
Positive emotions:	Positive emotions:
Feeling good	Satisfaction; Respect; Happiness; Pride
Engagement:	Engagement:
Finding flow	Organizational commitment; Identification with the school environment; Self-efficacy
Relationships:	Relationships:
Authentic connections	Trust; Collegiality; Support; Harmony; Collectivist culture
Meaning:	Meaning:
Purposeful existence	Professional alignment; Considered an asset within the school; Contributes to school mission and vision
Achievement:	Achievement:
A sense of accomplishment	Professional development; Academic and professional goal setting; Leadership opportunities

Distress and Mental Health Disorders

Often the culprit surrounding the distress of an individual is stress or burnout. Stress spurs an uncomfortable tension within an individual's body both mentally and physically; because it is filled with constraints, demands, and pressures that can result in serious health concerns (Sorenson, 2007). The human body is able to communicate warning signs for alarmingly high and detrimental levels of stress impressed upon an individual, however, if ignored for too long stress can also create consequences resulting in negative psychological symptoms: organizational boredom, anxiety, dissatisfaction,

burnout, and cognitive breakdown (Sorenson, 2007). Burnout is an extreme variation of stress in that it depletes the body of protective resources to help combat prolonged exposure to stress as well as prevents an individual from performing effectively due to severe exhaustion levels (Davidson, 2009). Teacher stress and burnout are often examined in the research without mention of other serious threats to an individual's mental health clearly addressed in The Diagnostic and Statistical Manual of Mental Disorders. Schonfeld and Bianchi (2016) examined the overlap between burnout and clinical depression. In the United States sample, researchers discovered that high portions of teachers classified with having burnout simultaneously met the provisional criteria for clinical depression (Schonfeld & Bianchi, 2016). The substantial overlap in burnout and depression is a call to further investigate not only the well-being of teachers in relation to stress and burnout, but to also investigate the current condition and prevalence of mental health disorders in United States teachers.

Defining the School Environment

In a general sense, the school environment can be described by its identifying physical markers as well as perceived or experienced intangible characteristics. These characteristic identifiers are also known as the school's climate or culture. The school climate is described through theoretical constructs, operational definitions and taxonomies (Rudasill et al., 2018). Hoy (1990) operationalized this as the organizational climate of a school. Other researchers have operationalized it as school culture (Peterson & Deal, 2011; Carpenter, 2015; Gregory, 2017; Garcia-Torres, 2019). As Rudasill, et al. (2018) suggested, there is definitional confusion over the operationalization of school

climate. The National School Climate Council (2007) determined, "school climate is based on patterns of people's experience of school life and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures" (p.3). Similarly, Peterson and Deal (2011) defined school culture as the "underground stream of norms, values, beliefs, traditions, and rituals that has built up over time as people work together" (p.49). Both definitions of climate and culture are described as the norms, values, patterns and rituals, as well as traditions and practices of a school organization; making it unnecessary to keep the constructs separate. Moreover, the school climate is viewed as part of the school environment associated with attitudinal, affective dimensions, and the belief systems of the school (Tubbs & Garner, 2008).

I conceptualize the school environment as an integrated construct of school climate and culture, as outlined by previous scholars, in conjunction with the physical school environment itself. In addition to the norms, values, goals, beliefs, and traditions that frame a school's climate and culture, the school environment is made up of the distinct tangible and intangible qualities experienced by an individual emotionally, physically, visually, and audibly. The emotional experience within a school environment is predicated on the inclusive and welcoming nature of all members of the school community. The physical qualities of a school environment are noted by the presentation and preservation of the school grounds, building, and equipment. Visually, the school environment is experienced by decorative student work and wall murals, communicative bulletin boards, and observed encounters by community members. The school environment is audibly experienced in the shared language between school leaders,

teachers, and students as well as the audible happenings throughout the school day in common spaces such as the cafeteria, hallway, and classroom. Together, all of these factors help to differentiate one school environment from another. Therefore, it is useful to integrate the organizational structures found in a school's climate and culture along with the experiences within the school environment, as each construct helps to characterize the entirety of the school environment.

Attributes of the School Environment

Three common properties are featured in every school environment. Regardless of the sector, demographic composition, geographic location, or education level, the school environment is (a) a shared, interpersonal experience; (b) reciprocally influenced; and (c) reflective of leader and member input. In this section of the paper, I discuss these three attributes in further detail.

Shared Interpersonal Experience

The school environment is experienced in a multitude of ways by a multitude of people. It is beyond an individualistic experience, rather a group phenomenon that is larger than any one person (Cohen et al., 2009). The environment of a school is comprised of patterned goals, values, and interactions that shape relationships (Rudasill et al., 2018). These interactions are specific to students, teachers, school leaders, and school community members. More importantly, they are bound by interactions between groups and among groups, limiting the probability for the isolation of an individual unless that is a patterned norm within the school environment. In which case it could lead to a normative perception of isolation among the group. The interpersonal relationships

throughout the school environment are further emphasized by the quality and character of life at the school (Cohen et al., 2009). Not only is there a need to understand what the experience is for school community members, it is equally important to understand how the environment is being experienced by all. The question then emerges is the school environment of good health and quality? The health of a school environment is encompassed by positive interpersonal dynamics (Hoy et al., 2003). Hoy and Tarter (1992) suggested healthy schools are maintained by teachers that like one another, have a mutual sense of trust, are enthusiastic about their work, and ultimately have positive regard towards their school. The quality of interpersonal relationships among school community members affects the perception of the school environment. As the character of the school environment is determined by the interactions of school community members, it is important the school leader and teachers maintain positive relationships in order to facilitate a positive experience within the school environment.

Reciprocally Influenced

There is a bi-directional relationship between the school environment and those within it. The shared patterns, norms, values, and beliefs all become ingrained into the environment by the behaviors, traditions, and practices of teachers and school leaders. The school environment is influenced by informal and formal relationships, the varying personalities of individual school community members, and the school leader (Hoy & Tarter, 1992). The essence of a school environment becomes founded on what school members are willing to contribute to the environment as a whole. While the school environment is influenced by the norms, values, interpersonal relationships, and

dynamics of school members; there is a reciprocity of influences occurring for school members as well. The climate found in a school environment can significantly influence teacher behaviors (Tubbs & Garner, 2008). It is the set of informal expectations that influence how people think, feel, and act in schools (Peterson & Deal, 2011). Expectations whether formal or informal act as a framework for individual behavior within the school. In an open school environment teachers are not exposed to organizational rigidity (Hoy & Clover, 1986). Instead, teachers are able to act in a professionally autonomous way as allowed by their school leaders. Furthermore, the open school environment facilitates a continuous flow of information and instructional support between teachers working to create optimal learning environments for students in the school. Openness, professional inclusion, and collaborative peer relationships among teachers are important aspects of positive school environments (Thapa et al., 2013).

A positive school environment also influences student achievement. In a cross sectional, ex post facto study conducted by Conner (2014) which sought to determine the perceptions of teachers concerning collegial relationships, school climate, and faculty comradery, 100% of teacher respondents (n = 325) believed the school climate almost always or usually impacts student achievement. One year prior, Thapa et al. (2013) reported a positive school environment promotes school learning. Both studies articulated the relationship between the school environment and student academics, however, Thapa et al. (2013) pushed the relationship further in emphasizing the type of school environment conducive to promoting student learning: positive. The school environment can only be categorized as positive, open, and healthy as long as the interpersonal

relationships, shared experiences, norms, beliefs, and values shown by its members are also positive, open, and healthy.

Reflective of Leader and Member Input

A reflective school environment mirrors the attitudes, beliefs, and behaviors of its community members. This concept is especially true of the school leader. A dynamic leader adds to the health of the organization with flexibility and open communication (Hoy & Clover, 1986). The behaviors of the leader are reflected in an open, healthy environment where the people within it have strong, positive collegial relationships with others and an affirmative attitude indicating they want to be in the school building (Hoy & Clover, 1986; Hoy et al., 2003; Hoy & Tarter, 1992). How teachers treat one another and students as well as how school leaders treat students and teachers is a representation of the normative expectations regarding the treatment of others. The norms of a school environment are symbolic (Peterson & Deal, 2011).The shared goals, collegial nature of working together to problem solve and achieve challenging tasks is also characterized by a set of expectations throughout the school. School norms have the ability to communicate the character identity of a particular school. The character is what the school stands for or what the school is all about. The school environment as a symbolic identifier is representative of each person within the school community. An organization's climate is reflected in its structures, policies and practices; the attitudes and values of its members and leaders; and the quality of personal interactions (Tubbs & Garner, 2008). Poor attitudes upheld by members and leaders will be reflected in the school environment with poor or low morale. Conversely, a school that sets forth high

and attainable academic expectations will be reflected in the actions of teachers moving students toward academic success. Lastly, a school leader who is unaware of the conditions of the school environment will be reflected in a school's inability to collectively influence school members to positively affect the school environment for a sustainable and impactful timeframe.

School Leader Practices

The actions of a school leader echo throughout the school environment in the norms, values, and expectations of members in the school community. How a school leader chooses to execute their leadership style and communicate their mission and vision is crucial to the development of the space surrounding teachers within the school environment. The school environment is a complex, multi-layered, and influential entity. The experiences of teachers within the school environment leave such an impression that it can affect a teacher's mental health. Bronfenbrenner (1977) argued to understand human development requires an examination into an individual's environment and the interacting systems surrounding them. An individual is situated at the center of a topologically arranged set of systems where each system is nested within another (Bronfenbrenner, 1977). In the first phase of ecological systems theory, Bronfenbrenner (1977) identified four systems in the ecological environment: the microsystem, the mesosystem, the exosystem, and the macrosystem. In relation to the school setting, teacher's and their mental health are at the center of this ecological application. Moreover, teacher mental health is nested within the school environment and the school environment is nested within the practices of school leaders. The named practices that

follow are practices found throughout educational leadership literature that have proven to impact a school environment for the betterment of teacher mental health.

Value the School Environment and Recognize Role as Leader

School leaders take on many leadership and managerial roles within a school building from instructional leader to human resource manager, which often causes leaders to neglect the role as leader of the school environment. For far too long the school environment has seemingly been taken for granted and often overlooked, even though it is actually one of the most important aspects of an educational enterprise (Peterson & Deal, 2011). Within the last three decades oversight regarding the school environment has started to change as researchers, educators, and the United Stated Department of Education have all taken a vested interest in the critical importance of safe, positive, and respectful school environments (Rudasill et al., 2018; Thapa et al., 2013). The school environment, based on collective experiences and perceptions, is affected by the principal's leadership (Hoy & Clover, 1986). It is important to understand that at the head of every school is a school leader with a great deal of power and influence. Basom and Frase (2004) noted the assumption of powers each school leader takes on when they lead a school building in stating that school leaders have a responsibility to not only manage academic instruction but also the conditions of the work environment by providing teachers with the opportunity to perform at their best and be at their best.

Principals who understand the value of the school environment engage in leadership practices that positively change the environmental climate of a school because they recognize the impact their behaviors have on the environment as a leader and the

impact the environment has on students and staff (Velasco et al., 2012). If a school leader fails to recognize the importance of the school environment, the school could become toxic and unhealthy (Peterson & Deal, 2011). When a school becomes unhealthy, it becomes vulnerable to outside forces (Hoy & Tarter, 1992). Often, a vulnerable school will experience unwanted pressures from parents and community stakeholders regarding academic policies or school procedures. School leaders that incorporate supportive practices into their leadership style are able to guard the school and teachers from any unwanted pressure. It is the school leader who is given control of the formal organization, and it is the school leader whose leadership practices set the normative and behavioral structure of the informal organization (Hoy & Clover, 1986).

Build Relationships

The relationships found in the school environment between school leaders and staff members as well as among staff members has been linked to elements of teacher well-being such as satisfaction, trust, and burnout. Richards et al. (2018) used a mixed methods research approach to understand how teachers with either high or low levels of burnout described their lived experiences as teachers. The findings of Richards et al. (2018) provided two drastically different environments for teachers with high and low levels of burnout. Teachers experiencing low levels of burnout perceived their schools as nurturing, affirming, and supportive. The relationships within the school were positive and created a strong sense of community. Conversely, those participants with high burnout perceived their school environment as combative and restraining with a lack of community. Participants also reported hostility among leaders and colleagues, as school

leaders created a competitive culture among teachers or "favored" certain subjects over others (Richards et al., 2018, p.777). Furthermore, teachers with high burnout shared the negative impacts the school environment conditions had on their health. When school leaders worked to build relationships throughout the school environment, reported burnout in teachers was significantly lower in comparison to schools where leadership practices encouraged a combative, subject elitist school environment.

Though the quality of a school environment can be perceived as combative, relationships among staff members can spark enough positivity for teachers to cope with the combative environment. Brissie et al. (1988) studied teacher burnout by examining the individual and situational factors considered to have contributed to the reported burnout. Through multistage regression analysis, notable predictors of burnout in teachers were found. Of particular note, the relationship between teacher burnout and peer support ($r = -.44$) was among the highest correlations found. The negative correlation denotes the relationship between more experiences of peer support and lower levels of reported teacher burnout. Peer support in Brissie et. al (1988) referred to a teacher's ability to discuss difficult situations involving administration or parents and challenging academic concerns regarding students through collaboration with other teachers.

Relationships in the school environment require varying levels of trust to be considered successful and effective. In an exploration of the relationships among faculty trust in the principal, principal leadership behaviors, and the academic performance of students, Tschannen-Moran and Gareis (2015) found collegial leadership behaviors of the principal were strongly related to faculty trust in the principal ($r = 0.92$, $p < .01$).

Teachers need to be able to trust their fellow colleagues as well as their administrators. Hoy et al. (1992) addressed several research questions concerning leadership and trust in elementary school settings. The focus of this research study was on principal behaviors that promote trust among the school leader and staff in order to be considered an academically effective organization for students. Correlation analyses found strong correlations between effectiveness and faculty trust in colleagues ($r = .65$, $p < .01$) and collegial teacher behavior ($r =. 54$, $p < .01$). Path analysis led to a surprising finding that only trust in colleagues ($\beta= .67$, $p < .01$) had a significant relationship to school effectiveness and not trust in the principal.

Peer support and collegiality fosters an environmental network of trust and increases individual connectedness to a school. O'Brennan et al. (2017) examined staff connectedness to the school in a multilevel analysis study. Where a climate survey featured questions to measure staff burnout, efficacy, school safety, and the school environment as well as contextual factors found in the school. O'Brennan et al. (2017) found White ($\beta = -0.008$, $p < .05$) female ($\beta = 0.006$, $p < .05$), teachers ($\beta = 0.36$, $p < .01$) reported a higher level of burnout than, minority, male, and paraprofessional staff members, respectively. Findings also showed participants that reported all three forms of connectedness were negatively associated with burnout, meaning they showed connectedness to their school ($\beta = -0.31$, $p < .01$), to their students ($\beta = -0.10$, $p < .05$) and to their administration ($\beta= -0.10$, $p < .01$).

Price (2012) believed job satisfaction collectively influenced the school community's ability to work together harmoniously as well as the commitment level of

school leaders and teachers. Therefore, the processes to produce positive school climates was examined as facilitated by organizational trust between teachers and school leaders. Price (2012) employed structural equation modeling to examine the relationship processes of school leader and teachers as well as distal relationship outcomes of satisfaction, commitment, and cohesion. As expected, the relationship between school leaders and their teachers significantly affects the satisfaction, commitment, and cohesion of not only teachers but the school leader as well.

The practice of building relationships corresponds to three of the five elements found in the PERMA model: positive emotion, engagement, and relationships. The first element, positive emotion, is an outcome of the relationships formed by school leaders and school staff. An outcome specifically cited in the research was an increase of teacher satisfaction (Brissie et al.,1988; O'Brennan et al., 2017; Price, 2012). A second outcome of relationships among school staff was an increase in engagement as evidenced by teachers feeling more connected and committed to their school organization (Price, 2012). Each outcome whether satisfaction, connectedness, commitment, or trust stemmed from the relationships teachers established with their colleagues and school leader. More importantly, each outcome serves as a benefit to teacher well-being.

Engage in Instructional Leadership

One of the more prominent roles of a school leader is the role of instructional leader. Teachers that worked under a school leader who adequately supports curriculum and instruction initiatives, perceived the school environment as a benefit to their personal well-being (Connor, 2014). Grayson and Alvarez (2008) examined characteristics of a

school environment to investigate the association between teacher burnout, specifically, components of the school climate and assessed their influence on the core dimensions of burnout: emotional exhaustion, depersonalization, and personal accomplishment. Through stepwise linear regression, Grayson and Alvarez (2008) found instructional management was the strongest predictor for personal accomplishment with an R^2 value of .065. As personal accomplishment is an element of the PERMA model, leaders that exercise instructional leadership behaviors assist teachers in achieving both personal goals and student academic goals. Similarly, Tschannen-Moran and Gareis (2015) found the instructional leadership behaviors of the school leader were strongly related to the level of faculty trust in them as a leader($r = 0.91$, $p < .01$). Frequent classroom observations, genuine knowledge of curricular standards, and setting high yet attainable academic expectations lead to increased faculty trust.

Instructional leadership behaviors are not limited to setting academic goals for the school and conducting classroom observations. Protecting the learning environment is also practice of instructional leadership. Although Dahlkamp et al. (2017) conducted a correlational study to examine the dynamics of school leader self-efficacy on the school climate and teacher retention only to find insufficient relationships between most variables, one aspect of school climate was found to have a statistically significant influence on teacher retention: institutional vulnerability. Institutional vulnerability pertains to a school's susceptibility to internal and external forces that cause a disruption to the learning environment (Hoy & Tarter, 1992). In this study, Dahlkamp et al. (2017) reinforced the importance of school leaders safeguarding teachers from detrimental

outside opinions held by school parents and community. Protecting schools and teachers from institutional vulnerability is a way for school leaders to continually build relationships with teachers, demonstrate administrative support, and promote trust within the organization.

Provide Clear Direction and Administrative Support

On occasion, failed initiatives occur in the school setting due to poor communication between school leaders and staff as well as limited availability of resources necessary to accomplish a school goal. In an exploration of leadership structures as a function of school culture and improvement at three secondary schools, Carpenter (2015) found clear expectations and support for initiatives ensured a positive school environment and led to intended instructional improvement. School leader implementation at each of the three school sites accounted for the contrasting results as each of the schools conducted the same new model of professional learning communities. In school environments with no administrative guidance and no initiative supporting resources or follow-up training, teachers expressed high levels of frustration. Carpenter (2015) reported the lack of supportive leadership led to a hostile and isolated school environment. Whereas teachers in a school environment with supportive and shared leadership reported feelings of empowerment and increased teacher collaboration. There is a need for school leaders to support teachers in the form of time, constructive feedback, and resources. Supportive leadership fosters faculty trust and job satisfaction (Hoy et al., 1992; Shen et al., 2012).

Offer Leadership and Professional Development Opportunities

School leaders that adopt a distributed leadership style and extend growth opportunities to staff members foster satisfaction in the school environment. Distributed leadership does not focus on the leader's role within a school organization, rather the leader's practice of spreading leadership activities across a group of formal and informal school leaders (Spillane et al., 2004). Garcia Torres (2019) investigated the relationship among distributed leadership, collaboration, and teacher job satisfaction. Two significant findings came out of the study with regard to teachers' perceptions of distributed leadership and the relationship between distributed leadership and teacher collaboration. Individual teacher's perceptions of distributed leadership were positively associated with job satisfaction, indicating teachers were more satisfied with their jobs when there was higher distributed leadership throughout the school. A significant, new reciprocal relationship between distributed leadership and professional collaboration was found. When teachers experience distributed leadership opportunities with autonomous powers to lead, they feel supported enough to confidently engage in creative collaboration with colleagues and to try innovative learning strategies in the classroom (Garcia Torres, 2019).

A second leadership style well suited for creating positive school environments is transformational leadership. Conceptually, transformational leadership includes four components: idealized influence, intellectual stimulation, individual consideration, and inspirational motivation (Bass & Riggio, 2006). A transformational leader is optimistic, charismatic, and enthusiastic; together these characteristics attract subordinates to

envision future states of success for themselves as individuals and as members within the organization (Bass & Riggio, 2006). In an investigation of the relationship between transformational leadership behaviors on teacher turnover and satisfaction, Griffith (2004) reported similar findings to Garcia Torres (2019). Charisma, consideration, and intellectual stimulation were the three components of transformational leadership that served as predictor variables in the models. The three transformational leadership variables equally showed a strong, positive and significant relationship to staff satisfaction, which in turn showed a moderate, negative and significant relationship to staff turnover.

Additionally, transformational leadership showed a strong, positive and significant relationship to school achievement progress. Through hierarchical linear modeling analysis, Griffith (2004) found achievement gaps were smaller at schools where teachers were reportedly more satisfied, and the principal was viewed as a transformational leader. The transformational leadership efforts reported by Griffith (2004) specifically intellectual stimulation and consideration involved encouraging teachers to think differently when addressing school concerns, challenging teachers to employ innovative teaching strategies in the classroom, and providing teachers with learning and leadership opportunities based on known strengths and interests. Teachers in school environments that incite elevated aspirations fulfills elements of the PERMA model through meaningfulness and personal achievement. In support of Griffith (2004), McCarley et al. (2016) found a relationship existed between 15 of the 25 factors of transformational leadership and three of the school climate dimensions: supportive,

engaged, and frustrated. The largest negative relationship reported in the study was between transformational leadership behaviors and teacher frustrated behaviors (McCarley et al., 2016). Illustrating that when leaders increasingly engage in transformational leadership behaviors, teacher frustrated behaviors decrease.

Establish Teacher Autonomy

While there are federal and state mandates school leaders must abide by, leaders can enact school level practices that adhere to the mandate and allow teachers the independence to exercise professional judgement within the parameters of the mandate. Von der Embse et al. (2016) illuminated the effects testing accountability policies can have on the school environment as well as on teacher mental health and well-being. Structural equation modeling analysis was conducted to find increased accountability pressures were negatively associated with more negative relationships between teacher and students, which were also associated with increased teacher stress. Further, increased accountability pressures were negatively related to perceptions of the school climate. Test accountability was strongly related to educator stress; creating a small direct impact on school climate. School climate also emerged as a significant predictor of educator stress. Von der Embse and Putwain (2015) reported nearly 30% of teachers experienced clinically significant anxiety specific to test-based accountability policies (As cited in von der Embse et al., 2016). Despite a school leader's inability to remove testing accountability altogether, an opportunity arises for school leaders within their respective schools to lessen the accountability pressure placed on teachers while increasing the support, trust, and autonomy needed to grant teachers the means to effectively execute

their role as classroom teacher. Exposure to an organizationally rigid school environment characterized by little to no flexibility in teacher autonomy is correlated to teacher burnout (Brissie et al., 1988). Furthermore, when teachers are granted autonomy through classroom control it leads to an elevation of job satisfaction (Shen et al., 2012).

Synthesis of Research

The studies reviewed for the present literature review were all intended to address teacher mental health as well as the school environment as influenced by the policies and practices of the school leader. Taken together, the studies were divided in their focus. Three dimensions of research unfolded between the studies that prevented the constructs of teacher mental health and well-being, the school environment, and school leader practices from directly interacting with one another. Of the 13 quantitative studies, four addressed the influence of the school environment on elements of teacher well-being, two addressed the role of the school leader on shaping the school environment, and the remaining seven studies addressed the policies and practices of the school leader and their influence on elements of teacher well-being. The seven studies identified under the dimension of school leader policies and practices on teacher well-being pertained to teacher job satisfaction and teacher trust through principal and collegial relationships. No study available fully or directly addressed the well-being of teachers from a PERMA model stance. Additionally, no studies directly addressed the mental health of teachers.

Despite the lack of studies that directly addressed teacher well-being and mental health, the three dimensions of studies exposed an opportunity to conjoin the bodies of literature to holistically examine the relationship among school leader practices, the

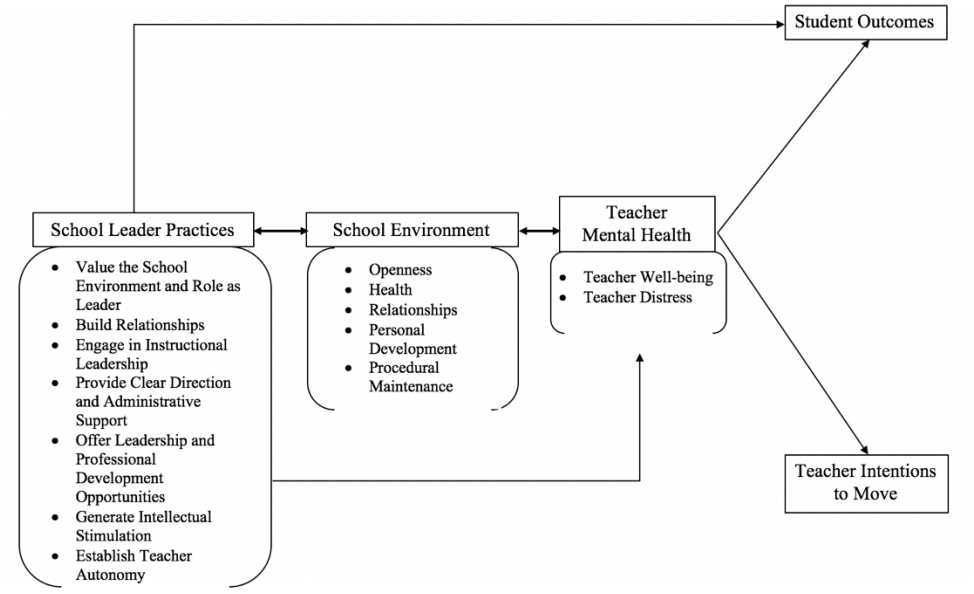
school environment, and teacher mental health and well-being. As Tschannen-Moran and Gareis (2015) found a direct and indirect relationship to faculty trust and student achievement, the relationship occurred through the conditions of the school climate. If the school climate was not healthy or collegial, the strength of the relationship would more than likely decrease as a result. Hoy et al. (1992) had a similar finding in that teacher trust in colleagues was the only predictor for student achievement. The findings of Hoy et al. (1992) reinforced the importance of understanding the specific conditions that allowed for trust in colleagues to emerge as a predictor within the school setting. In this case, it was the school leader's practice of building trust among staff that allowed the development of such a trusting school environment for teachers, thereby creating trusting, collegial relationships to boost student achievement. Both studies magnify the need to keep leadership practices in the investigation of the school environment and teacher mental health.

School leadership practices directly influence the condition of the school environment which in turn directly influences the mental health of teachers. As seen in Figure 1, there are several practices school leaders can exhibit to directly influence the school environment in a positive manner. These contributive practices help create open, healthy, and socially affirming environments for teachers and students. Although the relationship between school leadership practices and teacher mental health is indirect, it is important to recognize the school environment acts as a vessel to facilitate increased or decreased mental health. Through school leader practices, the school environment can be an asset to its members thereby promoting teacher well-being and mental health. The

same is true of student outcomes. Despite the indirect effect school leader practices have on student outcomes, a positive school environment allows teachers to be well and directly influence student learning outcomes. Lastly, teacher mental health is directly linked to teacher intentions to move. Teachers experiencing positive well-being are more likely to stay in a school over teachers experience declining well-being and mental health.

Figure 1

Leader Practices, School Environment, and Teacher Mental Health Conceptualization



Most of the quantitative studies employed a variation of regression analysis through structural equation modeling or hierarchical linear modeling. As a majority of the 13 quantitative studies used participants from multiple school sites, districts, and states it was a methodological strength to use these types of analyses to find the best fit for the analytical models and to prevent any of the correlations from inflating due to the nesting of results from multiple respondents in one school site. With the exception of Dahlkamp

et al. (2017) studies had a large sample size to support their findings. Dahlkamp et al. (2017) was the only study to have inconsistent findings in comparison to prior research studies and those present in the current review. One possible explanation to the inconsistent findings is the small number of school leaders that participated in the study. As the study's focus was on school leaders and their self-efficacy in relation to teacher and school outcomes, it would have been more beneficial to recruit additional school leaders because the leaders were the unit of analysis more so than the school environment or teacher well-being measures. Richards et al. (2018) was the only mixed methods study of the 13 quantitative studies. By employing a mixed methods research design, Richards et al. (2018) was able to utilize both quantitative and qualitative data to strengthen research findings. The integration of both sets of data provided additional in depth qualitative context to initial quantitative findings.

Implications

As a school leader it is of the utmost importance to recognize the commanding impact leader behaviors have on the school environment. Without the recognition that the head of the school influences the character of the school environment and the school environment is a powerful force within the context of a school, it is nearly impossible for a school leader to intentionally produce a school environment that is healthy, open, and beneficial to teacher mental health. Due to the bi-directional relationship between the school environment and its members, the school leader must acknowledge the significance of the school environment in relation to teacher and student outcomes as

well as the notion that school leader practices or behaviors contribute to the quality of the school environment.

There is an invaluable return on investment when school leaders make a concerted effort to build relationships with and among staff members. When teachers experience collegial leadership and relationships, job satisfaction and commitment increases (O'Brennan et al., 2017; Torres, 2019). Teachers committed to their colleagues and school are more likely to remain in their position thereby lessening teacher turnover at that particular school. School leaders with the ability to retain staff and promote job satisfaction are provided an assurance schools experiencing high rates of turnover do not possess as teacher retention fosters increased rates of instructional and environmental stability.

The extension of meaningful leadership or professional development opportunities to staff members not only strengthens the individual capabilities of a staff member, it often strengthens the quality of instruction and environment of the school. Furthermore, it provides an avenue for distributed leadership which develops the leadership capacity of teachers.

In the educational setting teacher mental health has not been as heavily researched as distress, consequently inviting educational researchers to contribute valuable scholarship in this area. When positive elements of PERMA were investigated, the constructs satisfaction and trust were predominately studied. As there is limited empirical research that focuses on teacher well-being as a meta-construct in the United States, there is a need to define teacher well-being with a holistic conceptualization. In addition, there

is a call for research that investigates school environment measures as a predictor for reported teacher mental health to understand the relationship between both variables in terms of prevalence and strength. Future research questions in this area include: what is the relationship between reported teacher mental health and characteristics of the school environment; what is the relationship between reported teacher distress or mental health disorders and characteristics of the school environment; and how do the practices of school leaders regarding the school environment explain reported levels of teacher mental health?

Conclusion

The school environment is a shared, influential, and reflective construct that has the ability to positively or negatively affect the well-being of teachers and others within the school community. Moreover, school leader practices shape the conditions of the school environment either creating an open, healthy, and autonomous environment or an environment that is considered rigid and unhealthy. Open, healthy school environments promote teacher trust, job satisfaction, and organizational commitment which in turn builds a stronger, healthier school environment. When school leaders engage in practices that facilitate a positive school environment, teacher mental health flourishes. School environments that encourage teachers to flourish as professionals may help to increase teacher retention as teacher mental health is associated with teacher intentions to move and student performance outcomes.

In reviewing prior research involving teacher mental health and well-being, a division in the literature emerged. While there is literature to address school leader

practices, the school environment, and teacher mental health; there is a continued need to develop a holistic conceptualization of teacher well-being. Furthermore, there is an additional need for educational researchers to begin investigating teacher mental health in a United States context. More specifically, a closer examination of the association among teacher mental health, the school environment, and school leader practices.

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CHAPTER THREE

THE SCHOOL ENVIRONMENT AND TEACHER MENTAL HEALTH: A CORRELATIONAL INVESTIGATION

Abstract

The school environment is a powerful and influential factor in student learning, teacher retention, and teacher mental health. Exposing teachers to unhealthy school environments could lead to increased teacher distress defined by stress, depression and or anxiety. Yet, there is little research available on the relationship between the school environment and teacher mental health. In this study, I used an ecological approach to examine the effect of an individual teacher's school environment on their mental health. Seligman's (2011) theoretical model of well-being, Moos's (1973) human environment theory, and Bronfenbrenner's (1977) ecological theory, were drawn on to provide a framework for this investigation. In this quantitative, non-experimental design inquiry, I selected the Workplace PERMA Profiler, Depression Anxiety Stress Scales, and Revised School-Level Environment Questionnaire to assess participating teachers' mental health and characteristics of their school environment. I employed structural equation modeling for data analyzation. My findings indicate that school environments perceived as more positive elicit higher well-being and lower distress in teachers. Moreover, research findings identify significant pathways from dimensions of the school environment to teacher well-being and distress. This research adds to the few studies holistically examining teacher well-being or measuring teacher mental health indicators in a United States context. Practical implications for formal and informal leaders responsible for the school environment are provided.

Introduction

Teacher attrition is costly to schools and school districts nationwide. According to an Alliance for Excellent Education report (2014), on average, teacher attrition costs the United States $2.2 billion dollars annually. The average state by state cost of teacher attrition varies tremendously from $2 million to upwards of $235 million. In the state of South Carolina, based on historical data, teacher attrition has cost the state an estimated $17 million to $37 million each year (Alliance Report, 2014).

In addition to the direct cost assessed to districts losing teachers due to attrition, students pay a greater price when teachers constantly move from school to school. Ingersoll (2001) coined the term "revolving door" to describe teacher movement. Excessive teacher movement in the school setting leads to further instructional instability (Djonko-Moore, 2016), which can produce harmful academic implications for students. Depending on district funding, schools may not be capable of immediately filling teacher vacancies, possibly leaving students with long term substitutes or larger class sizes to supplement the shortage. In scenarios when a teacher is expeditiously replaced, the new hire is likely newly certified, inexperienced and typically does not remain at the school for an extended period further exacerbating instability in the school's instructional environment (Djonko-Moore, 2016).

The Center for Educator Recruitment Retention and Advancement (CERRA) publishes the South Carolina Annual Educator Supply and Demand Report. Every year since 2015, CERRA has reported over 6,000 annual teacher departures. Of particular interest, to CERRA representatives, was the reason for teacher departures. In the latest

2019-2020 publication, CERRA reported an increase in teachers leaving for "personal/family reasons" and "undisclosed reasons." Teachers citing personal family reasons for departing rose from 17% the year prior to 40% in the 2019-2020 survey year. Additionally, teachers choosing not to disclose reasons for their departure rose from 7% to 28%. Combined, teacher departures for undisclosed reasons and personal or family reasons constituted nearly 70% of the reasons for teachers departing outside of other options such as retirement. This increase in undisclosed and personal or family reasons for teacher departures suggests additional factors, possibly within the school setting, not provided as a departure reason lead to teacher movement.

In reference to the reasons for teacher departures, the CERRA report authors remarked, "a considerable number of teachers state personal/family reasons for leaving … it is likely that teachers are not always forthcoming with their reasons for leaving especially if related to school administration and or poor working conditions" (CERRA, 2019, p.12). Teacher attrition and mobility due to poor working conditions is likely a cost that can be prevented with increased understanding for what conditions embody a poor work environment as well as targeted interventions to improve conditions. However, before policy makers, educational leaders, and educational researchers jump to reform school-working conditions based solely on improving fiscal or migratory outcomes, it is necessary to first address why working conditions hold such significance for the human being at the crux of it all: the teacher.

Before school-working conditions can affect a teacher's decision to remain at a school, move schools, or leave the profession; the antecedent to this decision heavily

relies on the teacher's feelings toward their school environment and feelings surrounding who they are as an educator within that school environment. In a 2005 text entitled, "Teacher Working Conditions that Matter: Evidence for Change" Leithwood challenged educational leaders and policy makers to deeply reconsider the ways in which school environments were developed because school environment conditions mediate teacher commitment and satisfaction. According to Leithwood (2005), the culture of a school's environment serves as a precursor in a reactionary chain that goes on to influence teacher affect, student achievement, and even teacher movement. From this perspective, teacher movement is a symptom of a greater issue found in conditions of the school environment.

As conditions of the school environment can sway teacher emotional states, previous scholarship has primarily investigated teacher job satisfaction, burnout, and other teacher emotional indicators which all graze the assessment of teacher mental health in totality. Understanding the effects of the school environment on teacher mental health can inform the work of educational leaders seeking to create optimal school environments that promote teacher emotional wellness and retention. In the present study, I sought to investigate the relationship between characteristics of the school environment and teacher mental health using meta-construct indicators of well-being and distress.

Study Underpinnings

Prior Research

Every school setting has an environment experienced by teachers, students, administrators, and school community members. Researchers have engaged in debate over what constitutes a school environment: school climate (Hoy, 1990; Rudasill et al.,

2018; Tubbs & Garner, 2008) or school culture (Peterson & Deal, 2011). The National School Climate Council (2007) determined, "school climate is based on patterns of people's experiences of school life and reflects norms, goals, values, interpersonal relations, teaching and learning practices, and organizational structures" (p. 3). Similarly, Peterson and Deal (2011) defined school culture as the underground set of norms, values, beliefs, traditions, and rituals built up over time as people work together.

In a review of both definitions, commonalities and overlaps appear. Norms, values, goals, and interpersonal relations are present in both school climate and school culture definitions, rendering it unnecessary to separate the two constructs. The environment is an intangible, malleable entity within a school setting propagated by the interactions of its community members, their patterned behaviors, norms, and organizational structures. Therefore, the school environment is a shared and influential space, and reflective of the norms found within that space.

Due to the powerful capabilities of the school environment, it has been routinely investigated over the last three decades in research yet often overlook in practice (Thapa et al., 2013). The conditions of the school environment are essential to understand because they have been linked to teacher outcomes and affect. More specifically, school environment conditions have been associated with teacher attrition (Griffith, 2004), collegiality (Conner, 2014), empowerment (Sweetland & Hoy, 2000), self-efficacy (Carpenter, 2015), trust (Gregory, 2017; Hoy & Tarter, 1992), stress, and burnout (Skaalvik & Skaalvik, 2011).

Stress is a pressure in life, which if left unmanaged could lead to significant health problems (Davidson, 2009). When left unattended for long durations of time, stress can become burnout. Maslach (1986) categorized burnout as three things: depersonalization, emotional exhaustion, and personal achievement. As teaching is an emotional and labor intensive profession (Hargreaves, 1998; Kinman et al., 2011; O'Connor, 2006), emotional exhaustion is the strongest indicator associated with burnout in teachers (Grayson & Alvarez, 2008). Further, burdening teachers with extended exposure to negative school environments increases the opportunity for them to experience burnout (Sorenson, 2007).

Teachers' perceptions of the school environment are critical. Perceptions of a negative school environment, one described as cold, rigid, or combative ,lead to higher burnout rates in high school teachers (Richards et al., 2018). In the same study, teachers from a different high school within the same school district felt their school environment was warm, nurturing, and affirming. The stark contrast in the characterization of the school environments based on teachers' perceptions revealed tremendous insight into the power teacher environmental perceptions have on rates of burnout. Of particular note, lower burnout occurred in teachers at positively perceived school environments in comparison to negatively perceived environments (Richards et al., 2018).

Rigidity in the school environment involves fixed norms that do not allow for deviation or flexibility of any kind (Hoy, 1990). Federal testing accountability is one example of rigidity in a school setting as it occurs annually in United States schools. Overly rigid schools fixated on testing outcomes breed difficult school environments for

teachers working to meet testing standards. Moreover, this rigidity is associated with teachers experiencing negative affect in terms of stress, burnout, and mild depression (von der Embse et al., 2016).

Rigid school environments are taxing on teachers, leave teachers feeling constrained (Richards et al., 2018) and are significantly correlated to teacher burnout (Brissie et al., 1988). Of note, Brissie and colleagues (1988) found rigidity (r=.50) as the strongest correlate to burnout despite simultaneously examining other positive, mediating factors such as internal rewards, peer support, and self-efficacy. Scholarship associating the school environment with teacher affect often exposes the negative impact a school's environment can have on teachers while also showcasing the positive effect the school environment can have on teachers (e.g. Grayson & Alvarez, 2008; Skaalvik & Skaalvik, 2009).

As teachers' perceptions of the school environment are critical to understanding the conditions leading to increased burnout, O'Brennan et al., (2017) found several school environment factors decreased burnout and increased positive affect in teachers. Teacher connectedness to their school ($\beta = -0.31$, $p < .01$), to their students ($\beta = -0.10$, $p < .05$) and to their administration ($\beta = -0.10$, $p < .01$) were negatively associated with burnout in teachers across 58 high schools in Maryland (O'Brennan et al., 2017). Teachers felt most connected when they experienced a sense of belonging and formed relationships with members of their school communities (O'Brennan et al., 2017). Forming relationships with school community members offers emotional and professional support for teachers. Relationships among colleagues fosters trust and

satisfaction in teachers (Raschke et al., 1985; Skaalvik & Skaalvik, 2011). Likewise, teacher-student relationships positively contribute to teacher affect as a great deal of intrinsic value and job satisfaction are derived from working with students (Raschke et al., 1985). Additionally, teacher-student relationships generate satisfactory feelings of purpose and meaning which often affirm a teacher's reason for joining the education profession (O'Connor, 2006).

As O'Brennan et al., (2017) established teacher connectedness to their school increases positive teacher affect through relationships, Sweetland and Hoy (2000) offered a second approach to teacher-school connectedness in teacher empowerment. Sweetland and Hoy (2000) viewed teacher empowerment as inclusion in the school decision-making process. Teacher empowerment strengthened participating school environments in multiple ways. First, teachers believed they and their professional perspectives were valued. Second, in Sweetland and Hoy's (2000) study, teacher experiences of feeling valued led to an increase in reading and mathematics achievement in students. Schools structured to increase teacher empowerment through decision making and leadership opportunities are poised to produce positive school environments for teachers (Garcia Torres, 2019) and positive outcomes for students (Sweetland & Hoy, 2000).

Theoretical Framework

In researching teacher mental health, I acknowledge mental health is a state (World Health Organization, WHO, 2005) whereby a dynamic process occurs leading to that particular state. As this perspective implies, a teacher's state of mental health is not happenstance, nor does it haphazardly occur in isolation. The process takes place as an

individual teacher interacts with their immediate and distal environment (Cross & Hong, 2012). Within these environments teacher development occurs intellectually, emotionally, behaviorally, and or physically. It is the development of teacher mental health in their school environment that situates this research. The work of Bronfenbrenner (1977), Moos (1973), and Seligman (2011) all lend themselves useful in developing a framework to inform this research to better understand the interplay between teacher mental health and the school environment.

Bronfenbrenner (1977) introduced the idea that environments are complex, topologically arranged layers that influence the development of humans. Further, according to Bronfenbrenner, the environment is comprised of systems, layered one on top of the other, all interacting along the way. The systems from closest to furthest from the individual are the: microsystem, mesosystem, exosystem, and macrosystem. Each system differs from the other in how it influences and interacts with the individual at the center.

The microsystem is the most immediate system in which an individual interacts. An example of a microsystem for teachers is the classroom learning environment. Surrounding the microsystem is the mesosystem. The mesosystem is comprised of the interrelations found in an individual's environment (Bronfenbrenner, 1977). As a teacher in a school setting, the mesosystem contains the relationships a teacher has with their colleagues, administrators, and other members of the school community.

Moving outward in the nested layers is the exosystem. In the exosystem, an individual is affected by what occurs here, however, they are not immediately involved in

events within this system. For a teacher, the exosystem is likely the decisions, practices, and policies of the school leader. While the teacher and school leader are both found in the same environment, the school leader is responsible for school operations and procedures, therefore, the decisions the leader makes with regard to the school may be made without the teacher but still may impact how that teacher operates within the school environment thereafter.

The encapsulating system fixed atop the nested arrangement is the macrosystem. The macrosystem refers to the overarching patterns of culture, such as the institutionalized structures in society economically, legally, socially, politically, and educationally (Bronfenbrenner, 1977). Each system, or layer, is influenced by the system above ultimately interacting in a way that shapes the development of the person at the center.

In line with an ecological approach, Moos (1973) proposed three dimensions found within an individual's environment that affect their behavior and emotional development. The relationship dimension, personal development dimension, and systems maintenance dimension are all separate social dimensions that serve an individual in varying capacities (Moos, 1973). The relationship dimension determines the extent to which individual teachers are involved in their school environment and the extent to which they support and help each other as colleagues (Moos, 1973). Personal development refers to the direction and frequency of development in a teacher. The intent of development in this case is to enhance the ability of a teacher while also providing opportunities for development at a sustainable and efficient rate. The personal

development dimension considers how goal setting occurs within the environment (Moos, 1973). In particular, goal setting in the school environment pertains to whether or not goals are being set for teachers but also whether or not teachers are receiving the necessary support to attain them. Moos (1973) noted the systems maintenance dimension addresses the organizational order found in an environment. For schools, this would be an assessment of the clarity of directives given in the environment for teachers and students as well as the regulation of implemented school policies.

The WHO (2005) defined mental health as a state of well-being. In addition to a state of well-being, WHO (2005) recognized mental health as an individual realizing their abilities, coping with stressors, and contributing to their community. Given the foremost definition of mental health as a state of well-being, I relied on well-being measures posited by Seligman's theory of well-being throughout this study to define aspects of teacher mental health. Seligman (2011) integrated components of hedonia (the experiences of positives emotional states and satisfaction of desires) and eudaimonia (the presence of meaning and development of one's potential) into one model using five elements of well-being. The elements of the model are: positive emotion (feeling good), engagement (finding flow), relationships (authentic connections), meaning (purposeful existence), and accomplishment (a sense of achievement) (Seligman, 2011). Combined, the elements form the acronym PERMA, which will be used throughout the text to reference Seligman's theoretical model.

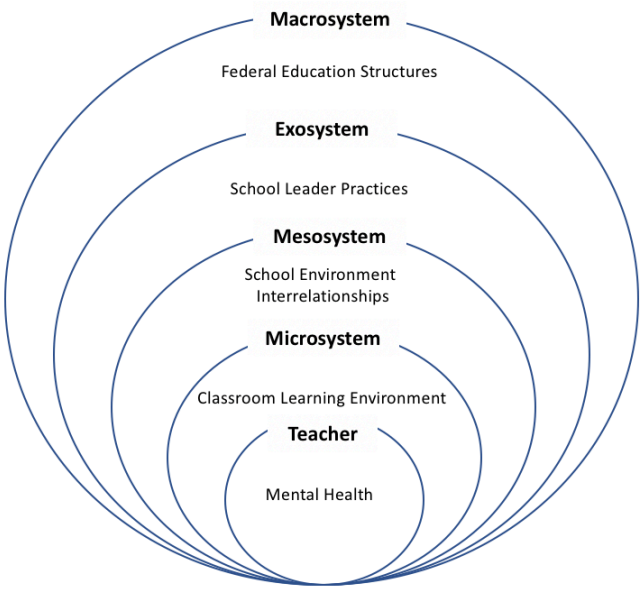
Taken together, these theories work in combination in two ways. The first, each theory explicitly informed my understanding of the concepts found in the study. As

illustrated in Figure 1, all three theories are present in one conceptual framework underpinning the research. The systems in Bronfenbrenner's social ecological theory, which foregrounds the research, can be seen in Figure 1.

As this study focused on the school environment, marked by the mesosystem in the figure, Moos' theory of human environment is useful in understanding the dimensions that make up the school environment and how each dimension works both independently and dependently of each other. The second way these theories work in conjunction is through the interplay across each layer pictured in the figure. The multiple, influential layers of a teacher's environment need to be jointly investigated to witness the effects and interactions between systems (Bronfenbrenner, 1977).

Figure 1

Ecological School Environment Conceptual Framework



The school environment can prove to be an invaluable resource in retaining teachers and improving student achievement when intentionally cultivated as positive, healthy, and open. Moreover; a positive, healthy, and open school environment can promote teacher mental health. Despite the work of scholars investigating relationships between the school environment and aspects of teacher mental health, limited research is available to thoroughly conceptualize teacher mental health, particularly well-being, as a whole construct. As a result, scholarship on teacher well-being is confined to the singular examination of constructs related to the school environment. The purposes of this study were threefold. The first purpose of this study was to determine the relationship between the school environment and teacher well-being as well as the relationship between the school environment and teacher distress. The second purpose was to examine the effects of each school environment dimension on elements of teacher well-being as well as indicators of teacher distress: depression, anxiety, and stress. The third purpose of the study was to explore the possible direct or indirect effects teacher well-being has on teacher distress in relation to the school environment.

Present Study

Three research questions that aligned with the three study purposes were developed to guide the present study. Thereafter, eight sub-research questions were established under research questions one and two to examine the relationship between the five school environment dimensions and the five elements of teacher well-being as well as the three indicators of teacher distress. The following research questions were posed throughout the present study.

1) What is the relationship between the school environment and teacher well-being?
    a. What is the relationship between the dimensions of the school environment and teacher positive emotions?
    b. What is the relationship between the dimensions of the school environment and teacher engagement?
    c. What is the relationship between the dimensions of the school environment and teacher relationships?
    d. What is the relationship between the dimensions of the school environment and teacher meaning?
    e. What is the relationship between the dimensions of the school environment and teacher achievement?
2) What is the relationship between the school environment and teacher distress?
    a. What is the relationship between the dimensions of the school environment and teacher depression?
    b. What is the relationship between the dimensions of the school environment and teacher anxiety?
    c. What is the relationship between the dimensions of the school environment and teacher stress?
3) What is the relationship between the school environment, teacher well-being, and teacher distress?

It was hypothesized that a significant, positive relationship would emerge between the two variables based on previous teacher satisfaction, trust, and collegiality research. Based on prior research on teacher burnout and attrition, it was hypothesized the school environment and teacher distress would share a significant, negative relationship. The third research question is exploratory in nature. It was hypothesized teacher well-being would indirectly affect teacher distress, essentially serving as a moderating factor that affects the strength of relationship between the school environment and teacher distress.

Methods

In the following section, I outline the methods employed throughout the study. I describe study assessment tools to measure the school environment as well as teacher well-being and distress. Following the overview of assessments, I provide details of study procedures, the sample, and data analysis.

Measures

School Environment

To assess conditions of the school environment, teacher participants completed the Revised School-Level Environment Questionnaire. Rentoul and Fraser (1983) developed the School-Level Environment Questionnaire (SLEQ) to measure the five dimensions within a school environment. Each of these dimensions were based on the social domains found in every human environment posited in 1973 by Rudolph Moos. The revised version of the SLEQ, also referred to as R-SLEQ, has 23 questions, pared down from the 48-question survey originally developed in 1980 (Henry & Crawford,

2005). Despite its brevity, the R-SLEQ was found to be a more concise and precise version of its predecessor. The R-SLEQ has been used in several school environment studies in Australia (e.g. Aldridge & Fraser, 2016; Fisher & Fraser, 1990; Rentoul & Fraser, 1983) and in the United States (e.g. Johnson et al., 2007).

The five school environment domains measured in the R-SLEQ are assessed on a five-point scale, where respondents indicate their level of agreement to survey statements. A respondent may answer with "strongly disagree" "disagree" "neither agree nor disagree" "agree" or "strongly agree." For example, a collaboration prompt read, "Teachers design instructional programs together." A student relationship dimension prompt read as, "Most students are helpful and cooperative with teachers." "Teachers are frequently asked to participants in decisions" was a sample prompt to assess decision making in the school environment. A prompt to measure school resources was, "Digital equipment, computers and Internet access are readily available." Lastly, a sample innovation prompt read, "We are willing to try new teaching approaches in my school."

Teacher Well-being

As well-being is one indicator used by the World Health Organization (2005) to define mental health, this study drew upon Seligman's well-being theory to measure the well-being of teachers. The Workplace PERMA Profiler was utilized as a study survey for teacher participants to self-report measures of well-being according to the five PERMA domains.

Kern and colleagues (2014) employed factor analysis to assess a series of theoretically relevant survey items in order to develop what is now the Workplace

PERMA Profiler. The 23-question survey measures the five constructs of well-being: positive emotion, engagement, relationships, meaning, and achievement. The profiler presents a question and respondents self-report on an 11-point Likert scale from zero to 10. Zero signifies a response of never or not at all and 10 signifies a response of always or completely. Each question is similar to the general PERMA Profiler, rather, the question is posed in relation to the individual's work setting.

The Workplace PERMA Profiler, presents participants with this sample question from the positive emotion domain, "At work, how often do you feel joyful?" Engagement is measured by the level of dedication to the organization and teacher's work as well as vigor or absorption towards a task (Schaufeli et al., 2002). An example engagement question, "At work, how often do you lose track of time while doing something you enjoy?" Participants are asked to reflect on their relationships with adults in their work environment, as an example the profiler asked, "To what extent do you feel appreciated by your coworkers?"

As Steger (2012) suggested, people function best when they feel connected to their work, especially when they believe their work provides purpose and direction. The Workplace PERMA Profiler addresses meaning in the workplace by asking participants, "To what extent is your work purposeful and meaningful?" Finally, Kern et al., (2014) viewed accomplishment as not only physical recognition but also personal mastery and daily achievement. In the school setting, these achievements can be considered developmental goals teachers set for themselves or for students, as well as, professional milestones school leaders set for the teacher. An example of an accomplishment question

from the profiler is, “How often do you achievement the important goals you set for yourself?”

Teacher Distress

In the present study, distress in teachers was indicated by depression, anxiety, and stress. The Depression Anxiety Stress Scales- 21 (DASS-21) was selected to measure the three indicators of distress in teachers. The 21-question survey is a shortened version of the full Depression Anxiety Stress Scales developed by Lovibond and Lovibond (Crawford & Henry, 2003). The DASS-21 consists of three, 7-item self-report subscales for depression, anxiety, and stress. Teacher participants identified how much a survey statement applied to them during the school year. In this study, teachers reflected on their experiences and feelings over the 2019-2020 school year, prior to the abrupt ending of the physical school year due to a global pandemic. Teachers were asked to self-report on a four-point Likert scale where zero indicated “did not apply to me at all,” one indicated “applied to me to some degree or some of the time,” two indicated “applied to me a considerable degree or a good part of the time,” and three indicated “applied to me very much or most of the time.” For example, the depression scale statement, “I could not seem to experience any positive feeling at all,” prompted teachers to reflect on to what degree the phrase applied to them. The statement, “I felt scared without good measure,” was one of seven items seen on the anxiety scale. Teachers responded to the prompt, “I found myself getting agitated” as well as other stress related statements on the stress sub-scale.

In 2005, Henry and Crawford tested the construct validity of the shortened version of the DASS with a non-clinical sample of general adult members in the United Kingdom. The reliability of the DASS-21 as a whole and its subscales for depression, anxiety, and stress were estimated using Cronbach's alpha. The Cronbach alpha for the total scale was .93 (95% CI = .93-.94). Cronbach's alpha for the Depression scale was .88 (95% CI = .87-.89), .82 (95% CI = .80-.83) for the Anxiety scale, and .90 (95% CI = .93-.94) for the Stress scale, which altogether suggested adequate reliability (Henry & Crawford, 2005). Furthermore, Henry and Crawford (2005) employed confirmatory factor analysis to test latent structural models of the DASS-21. Model results indicated combining Depression, Anxiety, and Stress sub-scales as a general measure of psychological distress has considerable validity (Henry & Crawford, 2005). Therefore, I selected the DASS-21 to measure distress in teachers as it was found to be both valid and reliable when used with a general adult population in a non-clinical setting.

Procedures

South Carolina teachers were invited to participate on a voluntary basis in the study through two social media platforms. Study surveys were distributed to teachers on Facebook via SC for ED, a social media group comprised of SC teachers dedicated to educational reform within the state. I provided a media message with a brief introduction to the study, the study purpose, and a secure Qualtrics hyperlink leading participants to study surveys. In the message, I also assured the participants their responses would be confidential. Additionally, regional SC for ED groups were provided the same content message with a link to the study surveys to attract more participants. Finally, to reach

underrepresented populations in the teaching profession, study surveys were directly distributed to South Carolina teaching organizations of color with the permission of organization gatekeepers (Creswell, 2007).

I actively monitored survey response rates each day the hyperlink was open. Marketing research showed surveys distributed through social media sites such as Facebook and Twitter garner the most participation within the first 36 hours of distribution (Knapton, 2020). Therefore, as the first distributed survey experienced a consistent decline in response rates, I posted a second message hyperlinked to study surveys on social media. After an additional seven days of close monitoring and slowed response rates, I ended survey data collection by closing active survey links and terminating continued access to study surveys.

Sample

As I sought to examine teacher mental health in South Carolina (SC), SC teachers from kindergarten through 12th grade were invited to participate in the study. In all, 250 teachers completed study surveys. Of the 250 teacher participants, 88% identified as White, 5.2% identified as Black, 3.6% identified as Latina/o/x, 2.4% as multiple races, 0.4% as American Indian, and 0.4% chose not to disclose their race or ethnicity. More teacher participants identified as a woman at 94.4% followed by 4.4% who identified as a man, while 1.2% of participants did not disclose their gender. No participants identified as gender non-conforming. Teacher participant ages ranged from 21 to over 60. Teacher experience in years ranged from zero to over 21. Lastly, teacher education background and route to teaching certification included teachers holding undergraduate degrees,

graduate degrees, and alternate teaching certificates. All three teaching levels; elementary, middle, and high school; were represented in the participant sample. A majority of teacher participants, 66%, taught on the elementary level. Middle school teachers made up 18.4% of respondents, while 14.8% of respondents were high school teachers.

Data Analysis

After surveys were closed to participants, I inspected all survey data for any missing responses. With the exception of five participants, all submitted surveys were completed in full including the demographics, R-SLEQ, WPP, and DASS-21. Of the 250 total participants, five participants failed to complete the final survey: DASS-21. This allowed 250 participants responses for research question one analysis and 245 participant responses- of the same 250 sample- for research questions two and three. I then began the analysis process by employing structural equation modeling (SEM). I used Mplus software to first run confirmatory factor analysis for each research question. After the model was confirmed, I ran SEM analysis to determine model fit for each research question. The following were used to evaluate and determine model fit: Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), Tucker Lewis Index (TLI), and Standard Root Measurement of Residuals (SRMR). RMSEA and SRMR are absolute fit statistics that allow researchers to evaluate and determine model badness-of-fit (Kline, 2015). For a model to be considered good, RMSEA and SRMR should be equal to or less than .05 and .08 respectively (Hu & Bentler, 1999; Kline, 2015). Generally, the use of multiple fit indexes is advisable to provide convergent evidence of

model fit (Houghton & Jinkerson, 2007). In addition to RMSEA and SRMR, I used CFI and TLI goodness-of-fit statistics to determine fit of study models where a model of .90 commonly indicates adequate or acceptable fit and models of .95 and above are considered good fit (Bentler & Bonnet, 1980; Hoyle & Panter, 1995; Kline, 2015). The following section of the paper provides an overview of study results followed by a discussion section.

Results

In this section of the paper, I report the results of structural equation modeling analyses. The section is organized in order of each research question. Research questions one and two also contain path analysis results identifying significant associations between dimensions of the school environment and indicators of teacher mental health.

Research Question One

Relationship between the school environment and well-being

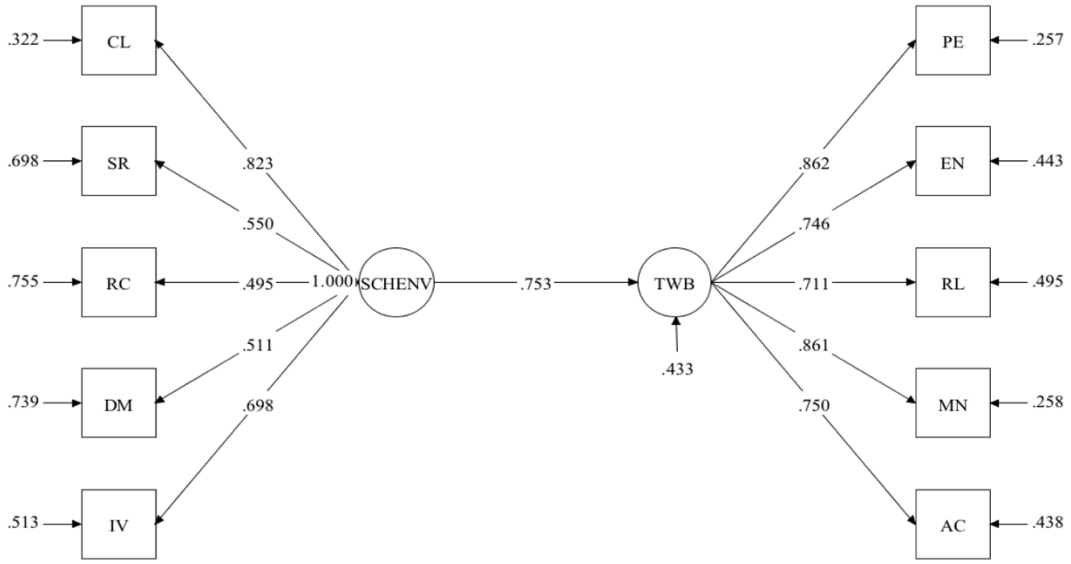
The first research question of the study was, "What is the relationship between teachers' perceptions of the school environment and reported levels of teacher well-being?" I utilized SEM to examine the relationship between dimensions of the school environment and elements of PERMA as teacher well-being. The school environment was represented as a latent variable comprised of mean values from survey subscales: collaboration, student relationships, resources, decision making, and innovation. Teacher well-being was also represented as a latent variable comprised of mean values from the scales: positive emotions, engagement, relationships, meaning, and achievement. In the model, teacher well-being served as an endogenous variable and was regressed onto the

school environment as an exogenous variable. The model fit was adequate where the RMSEA was $p < .05$ with 90% CI .08-.12 without any large residuals. Furthermore, the CFI and TLI were .92 and .90 respectively, indicating the correlations in the model were moderate to strong. Finally, the SRMR, a standardized measure of residuals, also suggested adequate fit measured at .05. As hypothesized, dimensions within the school environment shared a positive relationship with teacher well-being.

As shown in Figure 2, the measurement model displays the relationship between the school environment (SCH ENV) and teacher well-being (TWB). A positive relationship between the variables is present in Figure 2 where the conditions of the school environment correlates to the level of reported well-being with a standard estimate of .753, $p < .001$ and the model accounts for 58% of the variance. Meaning that for one standard deviation increase of the school environment a 0.753-point increase in a teacher's well-being mean value is expected. For example, the mean value of teacher well-being among 250 participants was 7.23 and the mean value of the school environment was 3.25, if the average teacher perceived a .582 increase in the conditions of their school environment, it is expected their reported feelings of well-being should increase .753 points to nearly eight out of a possible 10 points allowed on the Workplace PERMA Profiler.

Figure 2

Teacher Well-Being Measurement Model

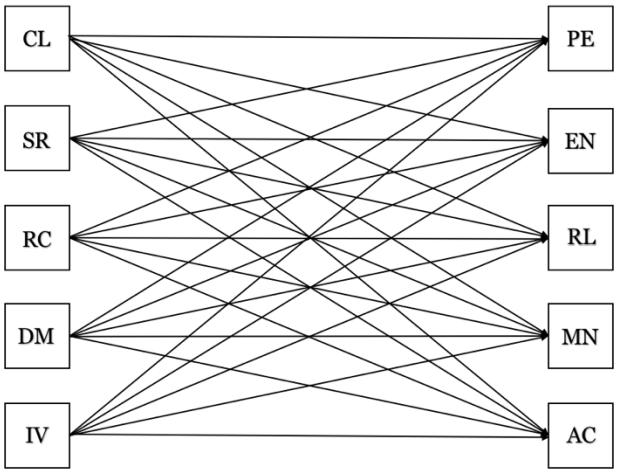


Additional sub-research questions were examined in connection with the relationship between the dimensions of the school environment and the five elements of well-being. Here, I employed path analysis and SEM to examine dimensions of the school environment directly related to individual elements of teacher well-being. More specifically, in this line of inquiry I sought to identify how the five dimensions found within the school environment related to teacher positive emotions, engagement, relationships, meaning, and achievement. As can be seen in Figure 3, the structural model for analysis where each element of teacher well-being was regressed onto each dimension of the school environment. The elements of well-being are annotated as follows: positive emotion (PE), engagement (EN), relationships (RL), meaning (MN), and achievement (AC). The dimensions of the school environment are noted as follows: collaboration

(CL), student relationships (SR), resources (RC), decision making (DM), and innovation (IV). The following section details the results of each sub-research questions under the first research question umbrella. Structural equation model fit was assessed by fit these indicators: RMSEA, CFI, TLI, and SRMR.

Figure 3

Environment Dimensions and PERMA Model



Dimensions of the School Environment and Positive Emotion. As illustrated in Figure 3, positive emotion, the first element of the PERMA model was regressed onto the five dimensions of the school environment to identify which dimensions impact teacher's most. Three dimensions emerged from the school environment as having a statistically significant relationship with teacher positive emotions. Collaboration ($\beta = .35$, $p < .001$) and student relationships ($\beta = 0.35$, $p < .001$) dimensions of the school environment shared the largest associations with positive emotions. Decision making ($\beta = 0.16$, $p < .05$), or teacher inclusion in school decision making, also shared a significant relationship

with positive emotions in teachers. In this model, resources and innovation did not share a significant relationship with teacher positive emotions. As this model was just-identified, the fit indices suggested excellent fit where RMSEA was 0.00 90% CI .00-.00 $p < .00$. Further, the fit indices suggested good model fit.

Dimensions of the School Environment and Engagement. Teacher engagement was described as a teacher's commitment to their work or the school as an organization. Engagement also referred to a teacher's ability to experience flow as they performed work related tasks. In this sub-research question, teacher mean values of engagement were regressed onto the five dimensions of the school environment. Of the five dimensions, two school environment dimensions emerged as having a significant, shared relationship with teacher engagement. Collaboration ($\beta = 0.23$, $p < .05$) and student relationships ($\beta = 0.19$, $p < .01$) were significantly correlated to teacher engagement. The model fit was determined to have excellent fit, as it was just-identified, with an RMSEA of 0.00 and 90% CI 0.00-.00. The CFI and TFI were both 1.00 and SRMR was 0.00.

Dimensions of the School Environment and Teacher Relationships. As an element of the PERMA well-being model; relationships; typically serve an individual as a source of support, comradery, or joy. Relationships are the connections an individual has made with "others," for teachers this would be connections formed with others in the school environment (Seligman, 2011, p. 20). In this sub-research question, I sought to identify which dimensions of the school environment were most associated with teacher relationships as a portion of their overall well-being. When the mean value score of relationships was regressed onto the mean value scores of the five school environment

dimensions, only one dimension was found to be significantly related to relationships: collaboration ($\beta = 0.66$, $p < .001$). Although, student relationship was a measure of the school environment, it surprisingly did not share a statistically significant association with the teacher well-being element relationship. In the discussion section, more details will be provided on this surprising result.

Dimensions of the School Environment and Meaning. Teaching as a profession carries great meaning to those who enter into it as a career because it is a profession of service built upon helping others and serving a bigger purpose. When regressed onto the five dimensions of the school environment, collaboration ($\beta = 0.37$, $p < .001$) and student relationships ($\beta = 0.38$, $p < .001$) surfaced as dimensions significantly related to meaning in teachers. Despite a large estimate, innovation was not a statistically significant relationship to teacher meaning.

Dimensions of the School Environment and Achievement. The fifth element in the PERMA model, achievement, shared significant relationships with three dimensions of the school environment. Collaboration ($\beta = 0.42$, $p < .001$) was the largest association and student relationships ($\beta = 0.24$, $p < .001$) was the second largest association. The third associated dimension significantly impacting teacher achievement was innovation ($\beta = 0.21$, $p < .05$). It is notable that innovation in the school environment is viewed as generating and applying new ideas, teaching strategies, programs, and technologies.

In Table 1, all observed or measured variables from the school environment and teacher well-being are present. Descriptive statistics are provided to detail the mean value of each variable as well as the range of responses provided by 250 teacher participants.

Normal distribution among responses was validated by measurements of skewness and kurtosis. Both indicators for normal distribution were within limits as skewness did not exceed an absolute value of three and kurtosis did not exceed an absolute value of 10 (Kline, 2015). Using Figure 3 as a model for analytical approach between the five dimensions of the school environment and five elements of well-being, the coefficient estimates are displayed in Table 1 where all significant relationships are signaled by one to three asterisks depending on level of significance. Unstandardized and standardized estimates are also shown in Table 1.

Research Question Two

Relationship Between the School Environment and Distress

Research question two of the study examined teacher distress in relation to the dimensions of the school environment. In particular, this research question focused on the experiences of depression, anxiety, and stress symptomology reported by teachers. The three mean values of depression, anxiety, and stress scales were used to determine an overall mean value for teacher distress as a whole. I employed structural equation modeling to test the fit for both the specified and measurement models. Like the model in research question one, the school environment served as the exogenous variable comprised of collaboration, student relationships, resources, decision making, and innovation as indicator variables. For research question two, distress served as the endogenous variable as indicated by depression, anxiety, and stress. Furthermore, the variable distress was regressed onto the school environment for analysis. The model indicated good fit as the RMSEA was $p < .05$ with 90% CI .05-.10. Additionally, CFI

Table 1

Descriptive Statistics and Estimates Between PERMA Variables

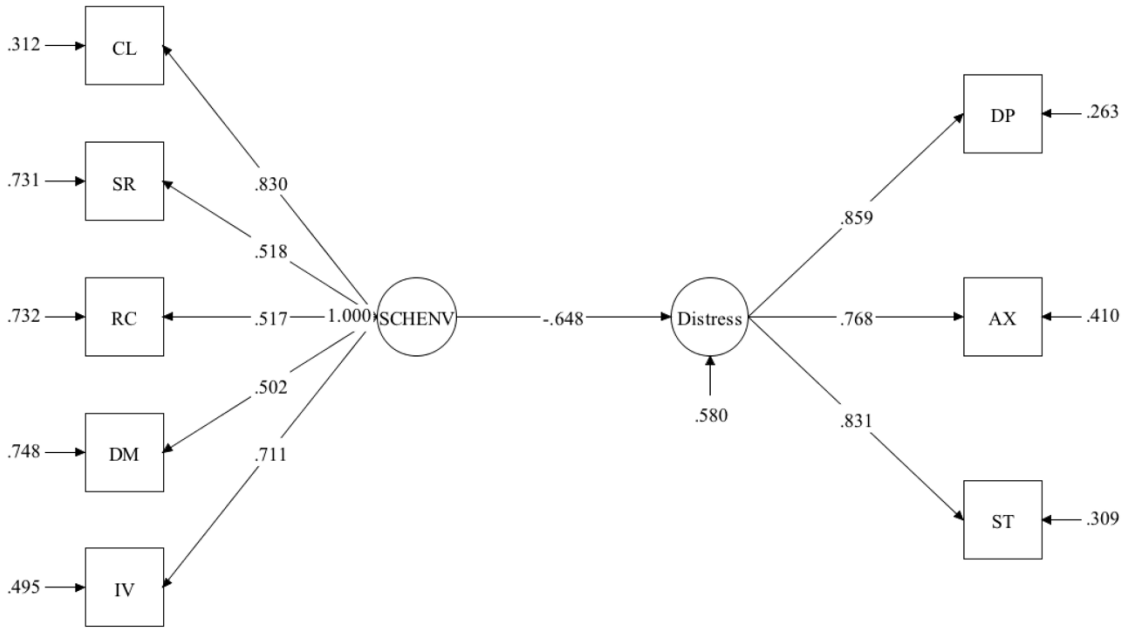
							Unstandardized Estimates					Standardized Estimates				
Observed Variable [a]	*M*	*SD*	Minimum	Maximum	Skewness	Kurtosis	1	2	3	4	5	6	7	8	9	10
1. Positive Emotion (PE)	6.46	1.81	0.00	10.00	-0.73	0.70						0.34***	0.34***	0.07	0.16*	0.13
2. Engagement (EN)	7.30	1.69	2.33	10.00	-0.66	-0.34						0.23*	0.18**	0.07	0.06	0.18
3. Relationships (RL)	7.12	2.04	0.00	10.00	-0.99	0.89						0.65***	0.10	0.11	-0.03	0.11
4. Meaning (MN)	7.82	1.53	1.67	10.00	-1.10	1.48						0.37***	0.38***	0.03	-0.04	0.15
5. Achievement (AC)	7.46	1.38	0.33	10.00	-1.05	2.61						0.42***	0.24***	-0.03	-0.04	0.21*
6. Collaboration (CL)	3.53	0.75	0.50	5.00	-0.72	0.71	0.61***	0.36*	1.32***	0.57***	0.58***					
7. Student Relationships (SR)	3.16	0.94	1.00	5.00	-0.45	-0.67	0.62***	0.29**	0.21	0.59***	0.34***					
8. Resources (RC)	3.43	0.79	1.00	4.75	-0.68	-0.06	0.12	0.12	0.23	0.04	-0.03					
9. Decision Making (DM)	2.51	0.79	1.00	4.33	-0.06	-0.81	0.28*	0.09	-0.07	-0.06	-0.01					
10. Innovation (IV)	3.65	0.75	0.00	5.00	-1.19	2.32	0.23	0.28	0.23	0.23	0.29*					

*Note. Sample size of 250; p < .001 ***, p < .01**, p < .05*

was .96 and TLI was .95 which suggested excellent fit. Lastly, SRMR was measured at .08. All measurements taken together suggested the model of the school environment and teacher distress is more than adequate with good fit. The model accounts for 41% of variance where the school environment ($\beta = -0.648$, $p < .001$) shared a significant, negative association with teacher distress. In Figure 4, the measurement model of research question two is displayed.

Figure 4

Teacher Distress Measurement Model

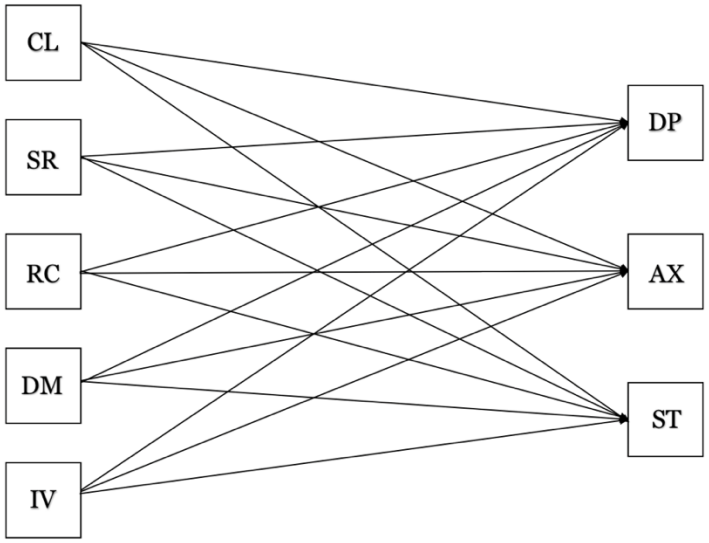


Dimensions of the School Environment and Depression. After the second research question established a significant relationship between the school environment and teacher distress, further inquiry led to three additional sub-research questions to examine which dimensions of the school environment specifically related to aspects of teacher distress. Figure 5 illustrates the model used to analyze which dimensions of the

school environment significantly correlated to teacher distress indicators. The first sub-research question focused on teacher self-reports of experienced depression symptomology. In a sample size of 245 the average reported level of teacher depression was 9.47. According to the DASS-21 scoring guide a score between zero and 9 is within normal range whereas a score between 10 and 13 is considered within the mild range. When teacher mean values for depression were regressed onto the mean values of the school environment dimension, three dimensions showed statistically significant associations with depression. Collaboration ($\beta = -0.36$, $p < .001$), student relationships ($\beta = -0.28$, $p < .001$), and resources ($\beta = -0.19$, $p < .01$) emerged as the three dimensions within the school environment to impact teacher reports of depression. This model showed excellent model fit and was just-identified as the known and unknown parameters were equal.

Figure 5

Environment Dimensions and Distress Model



Dimensions of the School Environment and Anxiety. The examination of the relationship between the school environment and reported anxiety in teachers was the second sub-research question. As one of the indicators of teacher distress, the mean values of teacher anxiety were regressed onto the mean values of the school environment dimensions. Collaboration, student relationships, and resources were the three dimensions of the school environment found to most notably impact teacher anxiety at a statistically significant level. Collaboration ($\beta = -0.29$, $p < .01$) was the highest standardized coefficient among the three school environment dimensions. Following closely behind with a more stringent significance level was student relationships ($\beta = -0.27$, $p < .001$). Lastly, resources ($\beta = -0.27$, $p < .001$) in the school environment addressed the consistent availability of school materials required to support instruction and student learning also proved a critical dimension affecting teacher distress indicators.

Dimensions of the School Environment and Stress. Stress in teachers was the final sub-research question under research question two. Teacher stress was reported to be an average of 16.68. A score of 16.68 fell within the mild range of stress. According to the DASS-21 scoring guide, the mild range for stress was between 15 and 18. Once regressed onto the dimensions of the school environment, collaboration and student relationships emerged as having statistically significant associations with teacher stress. Collaboration ($\beta = -0.31$, $p < .01$) shared a stronger relationship with teacher stress than student relationships and resources both with a standardized estimate of ($\beta = -0.16$, $p < .05$). In Table 2, all observed variables from the school environment and teacher distress

Table 2

Descriptive Statistics and Estimates between Distress Indicators

							Unstandardized Estimates			Standardized Estimates				
Observed Variable [b]	*M*	*SD*	Minimum	Maximum	Skewness	Kurtosis	1	2	3	4	5	6	7	8
1. Depression (DP)	9.47	9.51	0.00	42.00	1.19	0.78				-0.36***	-0.28***	-0.19**	-0.09	-0.02
2. Anxiety (AX)	9.28	8.61	0.00	42.00	1.31	1.83				-0.29**	-0.27***	-0.27***	0.02	0.04
3. Stress (ST)	16.64	9.04	0.00	42.00	0.40	-0.45				-0.31**	-0.16*	-0.16*	-0.09	-0.09
4. Collaboration (CL)	3.54	0.75	0.50	5.00	-0.71	0.73	-3.46***	-2.51**	-2.81**					
5. Student Relationships (SR)	3.16	0.95	1.00	5.00	-0.45	-0.68	-2.63***	-2.30***	-1.41*					
6. Resources (RC)	3.45	0.77	1.00	4.75	-0.66	-0.13	-1.84**	-2.31***	-1.48*					
7. Decision Making (DM)	2.51	0.79	1.00	4.33	-0.05	-0.82	-0.88	0.17	-0.77					
8. Innovation (IV)	3.65	0.76	0.00	5.00	-1.71	2.23	-0.17	0.38	-0.85					

*Note. Sample size of 245; $p < .001$ ***, $p < .01$**, $p < .05$*

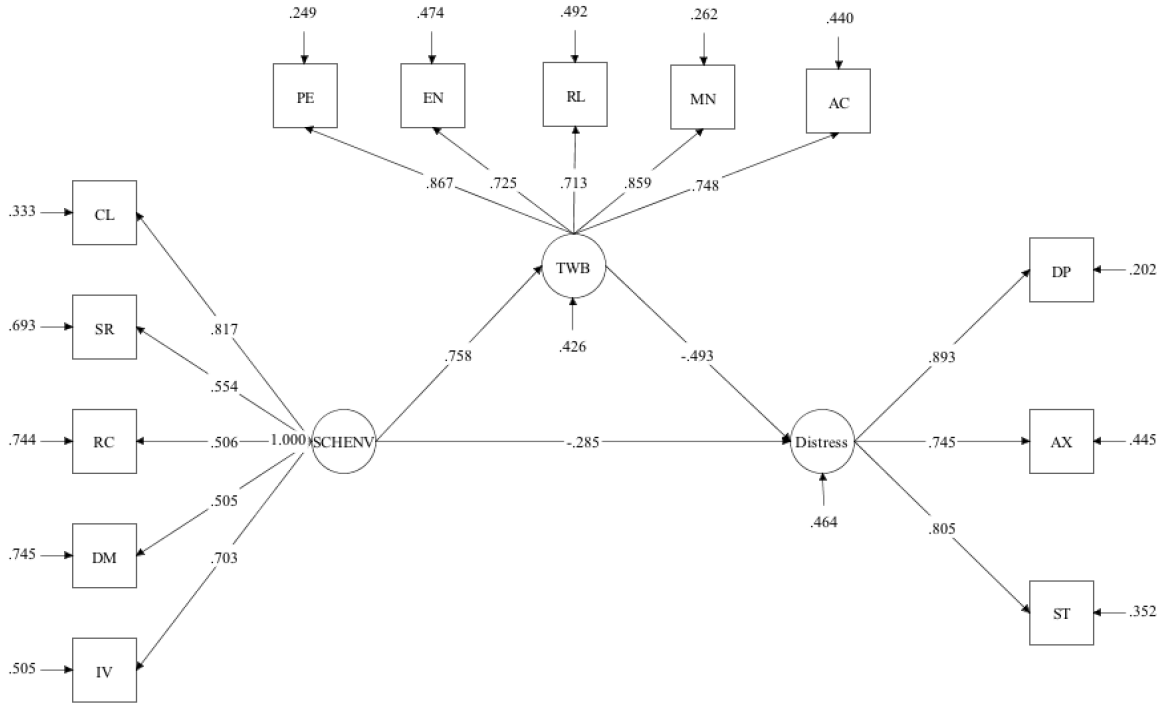
are present with descriptive statistics to detail the mean value of each variable as well as the range of responses provided by 245 teacher participants.

Research Question Three

The final research question of the study investigated the triadic relationship between the school environment, teacher well-being, and teacher distress. Hypothetically, teacher well-being, in particular high levels of well-being, would serve as a moderator between the school environment and teacher distress. In other words, high teacher well-being would mitigate the adverse influences of the school environment on teacher depression, anxiety, and stress. As seen in Figure 4, the measurement model exhibits a negative relationship between the characteristics of the school environment and indicators of teacher distress with a standardized estimate -0.648. Whereas in Figure 6, the relationship between the school environment and teacher distress has decreased to a standardized estimate -0.285. Teacher well-being and the school environment retained a standardized estimate of .753. Figure 6 also illustrates teacher well-being moderates the effects of the school environment on teacher distress with a standardized estimate -.493. This significant, negative relationship affirms the hypothesis where a teacher's level of well-being can serve as a buffer between the school environment and teacher distress.

Figure 6

Well-being and Distress Measurement Model



Of particular note, as this was an exploratory research question, the fit indices for the measurement model indicated a need for cautionary use of these results. To determine goodness-of-fit RMSEA, CFI, TLI, and SRMR were used as fit indicators. The fit indicators provided mixed results as far as adequacy. While CFI indicated adequate fit at .91, TLI fell slightly below the .90 threshold for adequate fit at .89. Likewise, SRMR indicated adequate model fit at .06, whereas RMSEA exceeded the cutoff for fit at .1. Although the model results for research question three were mixed, it does demonstrate the need for further investigation into the complex and moderating role teacher well-being could have in decreasing teacher distress in relation to the school environment.

Discussion

The purpose of the research study was to investigate the relationships between the school environment and aspects of teacher mental health. More specifically, I sought to examine teacher well-being as theorized by Seligman's (2011) PERMA model and teacher distress characterized by symptoms of depression, anxiety, and stress. Three research questions were developed to guide this line of inquiry. The first focused on the school environment and teacher well-being. The second examined the school environment and teacher distress. Finally, the third was an exploratory investigation into any direct or indirect effects teacher well-being may have had on teacher distress all relative to the school environment. The previous section detailed the data analysis procedures and results for all research questions. The following section serves as a discussion for how the results apply to teacher mental health as influenced by their respective school environment.

Well-being in Teachers

The five dimensions of the school environment impact elements of teacher well-being differently. As such, in this section of the paper, I discuss each dimension of the school environment in relation to teacher well-being. In particular I discuss the significant pathways from the school environment that contribute to teacher well-being.

Collaboration to Well-being

Although prior scholarship focused on constructs associated with the five elements of the PERMA model (e.g. teacher satisfaction, trust, collegiality, and self-efficacy) the parallels remain relevant to results of the present study. Prior scholarship

aligns with the results of this study in that there is a positive relationship between the school environment and teacher well-being. The school environment dimension collaboration shared a significant relationship with all five elements of teacher well-being. Collaboration, by definition is to join with one or more persons to produce or create something (Merriam Webster, 2000). Considering the nature of collaboration as a joint effort between people, it makes sense that positive emotion, engagement, relationships, meaning, and achievement were all associated. Seligman (2011) viewed positive emotion as an element that is subjectively assessed, where the amount of positive emotion is dependent on the preferences of the individual making the assessment.

Preference in positive emotion relies on the hedonic, or pleasurable moments, experienced by said individual. Such as ecstasy, comfort, joy, and warmth (Seligman, 2011). These elements are common effects of collaboration whether it is a teacher finding comfort with their collaborator, ecstasy in the process of collaboration, or joy in the finished product. It is understandable that collaboration shares a relationship with teacher positive emotion from this perspective.

The element engagement is subjectively and retrospectively assessed, where an individual evaluates their feelings of how an experience affected their level of interest and commitment (Seligman, 2011). Did I become absorbed in my task? Did I become so engulfed in what I was doing time passed quickly without me knowing? These questions relate to the level of involvement, whether consciously in energy and time or unconsciously in physically and mentally relinquishing themselves to the task at hand completely.

Although collaboration in the school environment and the well-being element, engagement, had a statistically significant association, it is worth noting this association was the lowest among all elements of teacher well-being. One possible explanation for such a low association is the establishment of the collaborative effort. In some cases, collaborative efforts, like professional learning communities based on common grade levels, planning periods, or content area are mandatory for teachers (Carpenter, 2015). In the event mandated collaboration is the case, engagement can still occur by process but may not yield high levels of engagement derived from enjoyment or flow (Seligman, 2011).

As an element in the PERMA model, relationships, particularly those held by teachers, shared only one significant association with dimensions of the school environment: collaboration. This was a surprising finding as no other school environment dimension was found to have a statistically significant influence on the well-being of teachers with regard to the relationships in the their lives; not even student relationships. Hoy and Tarter (1992) had similar findings while researching teacher trust, satisfaction, and the school environment. They found teacher trust was most significantly and only influenced by the trust they had in their colleagues, being teachers, over their school leader and others in the building. In other words, teacher trust in other teachers, is one of the most important bonds with regard to satisfaction in the school environment (Hoy & Tarter, 1992). One might argue an explanation to teachers finding collaborative relationships with other teachers as most impactful to their well-being is because of what these relationships provide them. Collaborative efforts help create a space where teachers

can share resources, skills, and knowledge as well as develop support for one another, which fosters trust in teachers (O'Brennan et al., 2017; Raschke et al., 1985) A second explanation as to why collaboration was the singular dimension associated with teacher relationships is the appropriateness of peer-to-peer relationships with other teachers. Student relationships, while important to teachers are strictly professional. Conversely, relationships formed with other teachers may begin as a professional relationship can then blossom into a personal or social relationship that continuously benefits the well-being of teacher.

Student Relationships to Well-being

Student relationships referred to the quality of interpersonal interactions between teachers and students. This dimension of the school environment was positively as well as significantly associated with positive emotions, engagement, meaning, and achievement of teacher well-being. Given that the foundation of the teaching profession is centered on helping and serving, it is sensible to find the shared relationship between this dimension of the school environment and these four elements of teacher well-being, especially, meaning and achievement. Joining the workforce as a teacher is making a contribution to the community and world (O'Connor, 2006). In relation to achievement, student relationships serve to benefit teacher well-being in the sheer experience of supporting students in academic growth and mastery. A participant in a 2006 study by O'Connor fondly recalled the "aha moment" between a teacher and student. The moment when a student excitedly connected with classroom content. Student relationships are essential to teachers as well as the teaching profession because without students or

student relationships teachers would no longer experience the "joy of coming in every day" to engage with a novice learner and witness academic growth. (Richards et al., 2018, p. 780).

Decision Making to Well-being

Teacher decision making in the school environment pertained to the inclusion of teacher voice in school goals, programs, and policies. In research question 1-alpha, decision making shared a significant relationship with teacher positive emotions ($\beta = .16$, $p < .05$). This relationship highlights the importance of school leaders creating an inclusive school environment for teachers whereby their professional perspectives are valued as well as an environment where teachers are provided leadership opportunities to contribute to school programming. Garcia Torres (2019) found individual teacher's perceptions of distributed leadership were positively associated with job satisfaction. As research continues to reiterate teacher satisfaction is also significantly linked to teacher attrition (Djonko-Moore, 2016; Ingersoll, 2001; Leithwood, 2005), it is in the best interest of school leaders to incorporate teachers into the school decision making process as much as possible because it leads to increased feelings of inclusion, empowerment, and positive emotions such as satisfaction (Garcia & Torres, 2019; Sweetland & Hoy, 1990) This is one way to build leadership capacity in teachers while simultaneously creating avenues for increased teacher decision making. School environments that nurture teacher decision making and empowerment deposit into the overall well-being of teachers.

Innovation to Well-being

Innovation can be realized in several ways in the school environment. For example, teachers bringing new ideas forward that improve efficiency in school procedures or spearheading a new initiative to increase student reading growth. Innovation fosters enhancement throughout the school environment, therefore, it is helpful to liken innovation in schools to a newly potted plant as several factors are required to take on a productive, fruitful life. The school environment must first be accepting of new concepts which allow for innovative ideas to be conceptualized and allow room to grow. Second, the school environment must be nourishing to both the new ideas of teachers as well as teachers' efforts to move their ideas from conception to implementation to sustainment. In the results of this study, the dimension of the school environment innovation ($\beta = 0.21$, $p < .05$) shared a significant relationship with the teacher well-being element of achievement. Achievement in teachers, was considered the ability of teachers to set professional goals for themselves and academic goals for their students. Achievement was also seen as having the ability and resources to attain goals set by their school leaders.

Innovation in the school environment encourages intellectual stimulation (Bass & Riggio, 2006) in teachers whereby the ability to learn and implement new ideas freely within that environment benefits the achievement of teachers. This is because innovation helps promote profession goal attainment in teachers as well as learning growth in students. The relationship between innovation and teacher achievement is an interesting finding as it affirms the idea that teachers need and want to not only see their students

grow academically, but that they are interested in experiencing professional growth as well.

Ultimately, student and teacher growth lead to growth in the school community. Promoting the school environment dimension, innovation, benefits school community stakeholders on a number levels. Instructional innovation leads to growth in student achievement. Continued professional development in teachers likely results in stronger teachers instructionally with new teaching strategies for implementation. As schools and schooling are continuously being reinvented to meet the needs of an ever-changing society, school environments primed for innovation are essential to both the academic benefit of its students and the well-being of its teachers.

Distress in Teachers

A vast majority of prior research that investigated teacher negative emotion directed its attention to teacher dissatisfaction, frustration, and burnout, all of which informed the field's knowledge on how numerous negative emotions predict teacher movement between schools and student achievement. Likewise, Mclean and Connor (2015) strengthened the argument that teacher negative emotions impact not only student achievement and teacher attrition, but that it also adversely affects the quality of the student learning environment. Results of the present study support results found in previous research. In referencing the measurement model and model fit of research question two, research question two's model generated the highest regression coefficient, or estimate, among all models. Moreover, SEM two yielded the best goodness-of-fit among all models.

One of the more interesting findings of this study centers on the relationship between the school environment and teacher distress. An unexpected finding uncovered a significant, negative relationship between school resources and teacher depression ($\beta = -0.19$, $p < .01$), anxiety ($\beta = -0.27$, $p < .001$), and stress ($\beta = -0.16$, $p < .05$). Given current discussions about school funding, defunding, and financial shortcomings of some school districts, one plausible explanation for this finding is the amount of money teachers spend of their personal income to fund materials in their classroom as well as increased use of grants and crowd sourcing websites to supplement unavailable resources in their own school. Anxiety in teachers with regard to school resources can relate to being fearful of their own financial needs if they financially prioritize school materials or apprehension over their professional outcomes if they are without necessary supplies to teach. While this was a surprising yet interesting finding, more research on anxiety and school funding or resources is needed to concretely substantiate this idea.

Limitations

This study is not without its limitations. The first limitation involved the fact that all survey responses consisted of teacher participants self-reporting on their perception of the school environment, feelings of well-being, and experiences of distress. Reliance on participants' self-reports has historically led to an over exaggeration of actual measurements due to subjectivity in the process. As this study was open to members of South Carolina teaching organizations seeking educational reform in the state, this interest may have impacted teacher rates of participation. Further, I am acknowledging participants may have a vested interest in teacher mental health thereby prompting their

voluntary participation. A second limitation in the study sample was the lack of demographic representation of teachers across the teaching population in South Carolina, rendering the results incapable of being used for generalizability purposes. A final study limitation was that structural equation modeling is also known as causal modeling. Contrary to the name, the results of this study do not establish causality between the school environment and teacher mental health. Future research in this area can overcome issues with sampling and generalizability by broadening the avenues of survey distribution and recruiting a larger teacher participant pool.

Conclusion

In this study I sought to determine the relationship between characteristics of the school environment and teacher mental health. Through structural equation modeling results showed 1) a positive relationship between the school environment and teacher well-being and 2) a negative relationship between the school environment and teacher distress, and 3) a direct, significant relationship between all three variables, the school environment, teacher well-being, and teacher distress. The findings from this study contribute to an under-researched field by illuminating the susceptibility of teacher mental health to the influences of unhealthy and poorly characterized school environments. The findings benefit scholars who study teacher mental health and well-being, as well as, school leaders seeking to create optimal school environments for teachers.

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CHAPTER FOUR

SCHOOL LEADER PRACTICES SHAPING THE SCHOOL ENVIRONMENT AND TEACHER MENTAL HEALTH: AN EXPLANATORY MULTI-CASE STUDY

Abstract

In this study, I first sought to understand how the practices of school leaders shaped teachers' perceptions of the school environment. Second, I sought to understand how leaders' practices related to the development of the school environment explained reported teacher mental health. This study was designed sequentially as a qualitative follow up study to a previously conducted quantitative research study. Three teacher participants were selected as critical cases to illustrate the hypotheses: school environments shared a positive relationship with teacher well-being and a negative relationship with teacher distress. A fourth teacher participant was selected to understand the context of a case divergent from study hypotheses. I collected data in April and May of 2020 via individual semi-structed interviews. I coded iteratively, relied on theoretical propositions, and employed explanation building to determine emergent thematic patterns. My findings illustrate how school leaders' behaviors directly impact the quality of the school environment alongside teacher mental health. Findings also underscore the importance of school leaders remaining cognizant of the humanistic side of the teaching profession by building relationships, providing administrative support, and depositing into the well-being of teachers. Study findings extend scholarship on school environment development and teacher mental health by connecting school leader practices to teacher mental health by way of the school environment.

Introduction

Mental health research and initiatives are on the rise as the topic of mental health has exploded onto the media scene and in everyday discussion. Within the last two decades, mental health initiatives have exponentially increased to provide services for members of the lesbian, gay, bisexual, transgender, and queer community, especially its youth (Fish, 2020), as well as other members of marginalized and underrepresented populations (Farahmand et al., 2011). In addition, the United States' public health sector has encouraged more people of color to seek therapies leading to positive mental health, including efforts to normalize therapy for Black men (Hankerson et al., 2015).

Mental health promotion has also moved beyond the general population into the school setting. First, there were small movements to bring mental health services to students. These efforts were mostly galvanized in Denver, Baltimore, and some larger school districts in California in the mid-1900s (Flaherty et al., 1996). Then, under the George W. Bush administration, the New Freedom Commission sighted a dire need for mental health services for school aged children 13-18 and called for a transformation in the delivery of mental health services in the United States (Stephan et al., 2007). The movement to bring additional services to students continues into the present day, for instance, the Mental Health Services for Students Act and Increasing Access to Mental Health in Schools Act were two legislative bills both introduced in 2019 on the House and Senate floors respectively to provide more funding for mental health services for students (H. R. 1109, 2019; S. 1642, 2019).

While the number of campaigns to promote individual mental health continue to climb for school aged children in an effort to reach young people earlier in life (Stephan et al., 2007), one must stop to think about the mental health of the adults with school aged children throughout the entirety of the school day. What is the state of teachers' mental health? According to a study conducted by Schonfeld and Bianchi (2016) using a general population sample in France, 86% of the teachers identified as burned out met the criteria for a provisional diagnosis of depression. Moreover, in the same study, the United States sample also reported that high proportions of teachers considered burned out met the criteria for a provisional depression diagnosis (Schonfeld & Bianchi, 2016). Although most are familiar with the term burnout as it strictly relates to occupational stress, teachers typically said to have burnout in both study samples were actually experiencing symptoms of depression. Depression is a common mental health disorder characterized by the American Psychiatric Association (2013) as persistent sadness and lack of interest or pleasure in daily activities.

Teacher mental health is extremely important to consider for the implications it has on student learning and well-being. Teachers that have experienced depressive symptomology at a statistically higher rate than those that have not, typically have more chaotic classroom learning environments (McLean & Connor, 2015). Moreover, teachers that experience low well-being are associated with higher student psychological difficulties (Harding et al., 2019), and decreased student mathematics achievement (McLean & Connor, 2018). Conversely, Harding and colleagues (2019) suggested teachers with better states of well-being are associated with better student well-being and

lower student psychological difficulties. Furthermore, teachers with lower depressive symptoms are associated with better student well-being (Harding et al., 2019).

In order for students to thrive academically, social-emotionally, and psychologically, it is imperative their teachers are also in a position to thrive in terms of their own mental health. Threats to an individual's mental health include psychosocial conditions within their relative social environment (Schmidt, 2007). For a teacher and student, this environment would be the school. School leaders play a pivotal role in the development of school environments through the implementation of daily practices and policies (Brown & Wynn, 2009; Gray et al., 2017; Griffith, 2004; Grissom, 2011).

As the practices of school leaders are connected to the school environment, researchers have found a connection between teacher emotional exhaustion, stress, job satisfaction, well-being, organizational commitment, and burnout to a school's environment (Aldridge & Fraser, 2016; Grayson & Alverez, 2008; Ingersoll, 2001). From these perspectives, an interconnectedness between leaders, environments, and teacher affective characteristics emerges. Despite its significance, there is little to no scholarly literature examining teacher mental health with regard to the school environment in the United States. Furthermore, scholars have not addressed the role of school leaders in promoting teacher mental health through supportive practices. The purposes of this research study were twofold. The first purpose was to understand how the practices of school leaders shape the school environment as perceived by K-12 teachers. The second purpose was to understand how school leader practices that shape the school environment then explain reported levels of teacher mental health.

In the following section I provide a review of related literature on school leader practices that were found to facilitate the development of a positively perceived school environment as well as an overview of the conceptual framework used to guide this study. As the World Health Organization (WHO; 2005) defined mental health as a state of well-being and scholars have established two dimensions of mental health (Keyes, 2005; Keyes, 2007; Lamers et al., 2015; Lyons et al., 2012; Westerhof & Keyes, 2010), I discuss mental health as well-being and constructs of psychological distress: depression, anxiety, and stress.

School Leadership Practice

School leaders cultivate school environment conditions in their practice, policies, and beliefs making the school environment a reflection of the school leader. The persona or personality the school environment takes on is mirrored in the formal and informal standards upheld in a school's environment. The school environment, commonly referred to as school climate and or culture, is defined by the National School Climate Council (2007) as the quality and character of school life based on patterns of experiences, and it reflects norms, goals, values, interpersonal relationships, teaching practices, and organizational structures.

As the conditions of the school environment are predicated on the practices of the school leader, it is also worth stating the mental health of teachers is thereby indirectly influenced by the school leader by way of the school environment. With teacher mental health connections stemming from the school environment, and conditions of the school

environment stemming from school leaders' practice, this section of the paper focuses on the practices school leaders engage in to create positive school environments for teachers.

Value the School Environment

The school environment is not assessed by governing educational bodies, therefore, making it susceptible to being left unmanaged even possibly turning toxic. Hoy and Clover (1986) stated the school environment was based on teachers' perceptions of the school's climate and these perceptions were strongly influenced by the practice of school leaders, thus making school leaders a critical component in shaping the school environment (Peterson & Deal, 2011). Based on their position within the school, school leaders are able to influence the development of the school environment thereby creating distinct working environments (Anderson, 1991; Velasco et al., 2012). Therefore, it is important for school leaders to understand that their behaviors have a direct impact on the condition of the school environment as a whole (Marzano et al., 2005).

As the head of a building, it is the responsibility of the school leader to value the school environment because their practices shape the environment of the school in upheld norms, values, and goals for community members. The school leader maintains control of the school as a formal organization. Moreover, school leaders' practice then sets the stage for the behavioral and normative structures of the informal organization (Hoy & Clover, 1986). As a result, the academic tone of the school environment also cues student responses to the demands of academic standards set forth by school leadership practice (Velasco et al., 2012). School leaders that value the school environment leverage their

position to impact academic performance by first creating a sustainable, positive school environment (Kelley et al., 2005).

Build Relationships

School leaders create a school environment characterized by positive attributes when they build relationships with teachers and students as well as facilitate opportunities for relationship building among school community members. For teachers, there are three primary relationships in a school that help shape perceptions of the school environment: (a) the relationships between the school leaders and staff members, (b) relationships among staff members, and (c) teacher-student relationships.

Teacher trust in the school leader is a reflection of the teacher's relationship with the school leader (Hoy et al., 1992). First and foremost, for a school leader to gain the trust of teachers, they must demonstrate a genuine level of concern for teachers (Tschannen-Moran & Gareis, 2015). Showing genuine consideration extends from teachers as professionals but also as human beings (Kelley et al., 2005). When teachers believe their school leader is attentive to their needs, engaging, and practices collegial leadership behaviors, the school environment is perceived as affirming (Richards et al., 2018). Furthermore, these practices are strongly related to faculty trust in the school leader (Tschannen-Moran & Gareis, 2015). With trust, teachers believe in the fairness of their school leaders (Tschannen-Moran & Gareis, 2015). Additionally, when school leaders maintain a trusting relationship with their staff, teachers believe the school leader will uphold their word with teachers and will act in their best interest (Hoy et al., 1992).

School leader-teacher relationships also affect teacher satisfaction, commitment, and school cohesion (Price, 2012).

School leaders who work to build relationships with staff would be remiss if they did not also work to create opportunities for teacher collaboration and relationship building. Shen and colleagues (2012) recommended that school leaders provide teachers with team building opportunities to increase teacher satisfaction and establish a positive school environment. School environments where school leaders strive to foster caring relationships throughout the building serve as protective factors against demanding stressors within the teaching profession (O'Brennan et al., 2017). Teachers experience an increased sense of community when provided organized collaborative experiences (Conner, 2014). Teachers find professional supports in collaborative opportunities where they can seek professional assistance for classroom management questions or concerns regarding a challenging student (Sorenson, 2007). Furthermore, teacher relationships foster trust in the school environment which has a positive effect on school outcomes. Tschannen-Moran and Gareis (2015) found teacher trust in one another was a predictor school effectiveness.

Teacher-student relationships enhance the school environment in its ability to function effectively as well as lower teacher rates of burnout (O'Brennan et al., 2017). Positive teacher-student relationships are essential towards teacher well-being (Milatz et al., 2015). Hargreaves (1998, 2000) and O'Connor (2006) found that teacher-student relationships were a source of enjoyment, motivation, and positive emotion for teachers. Likewise, Spilt and colleagues (2011) shared that teacher-student relationships contribute

to teacher well-being in a teacher's need for connectedness or relatedness. Relationships throughout the school environment build up the school's sense of community through genuine connections experienced by all from school leaders to teachers to students.

Engage in Instructional Leadership

School leaders engaging in instructional leadership are able to strengthen teacher ability and demonstrate their attentiveness to the school's academic environment. The results of Bellibus and Liu (2018) provided evidence that instructional leadership, implemented alongside distributed leadership, was important for building a positive school environment. In the study, school leaders that implemented instructional leadership improved instructional effectiveness and empowered staff members in the process (Bellibus & Liu, 2018). School leaders in the study established a positive school environment by facilitating instructional collaboration among teachers and encouraging teachers to take responsibility for instructional practices (Short & Rinehart, 1992). The positivity generated likely stemmed from the high levels of respect exhibited by teachers as they worked in collaborative groups (Bellibus & Liu, 2018).

As part of being an instructional leader, school leaders need to be present in classrooms observing instruction. Frase (2001) found frequent school leader classroom visits predicted: (a) teacher self-efficacy, (b) teacher perceived school efficacy, (c) teacher perceived efficacy of others, (d) teacher perceived organization effectiveness, (e) teacher perceived efficacy of the evaluation process and professional development, and (f) frequency of teacher flow. School leaders in the classroom signal to teachers that their work is important and their leader has an awareness for what occurs in the classroom

professionally, behaviorally, and instructionally (Blase & Blase, 1999). Moreover, leader presence in the classroom leads to more accurate, relevant, and constructive feedback for teachers (Blase & Blase, 1999). While school leaders can leverage classroom observations to strengthen instructional delivery informally, they can also use teacher evaluations as a formal assessment.

Prior research on the evaluation process has documented teacher concerns as they believed classroom observations were a state mandated ritual that rarely offered helpful feedback (Haefelle, 1993; Duke, 1995; Soar et al., 1993). When purposefully executed, teachers view school leader feedback as valuable and important (Frase, 2001) adding to the idea that when school leaders do take the time to observe and provide feedback, it assists teachers in becoming stronger educators, which in turn forges stronger instructional environments (Blase & Blase, 1999). As such, when school leaders engage in instructional leadership, it is imperative they are present and intentional about the feedback being provided.

Offer Development Opportunities

The school environment is a place for growth. Students enter the school to grow into academic learners and teachers should also profit from a school environment enriching enough for them to grow as educators. School leaders that cultivate school environments ripe with opportunities to build teacher capacity are able to build professionally fulfilling and meaningful work environments for teachers. Basom and Frase (2004) stated school leaders have the ability and responsibility to provide school environments and conditions that afford teachers the best opportunity to perform their

duties well, resulting in teacher satisfaction and motivation to aspire to higher quality teaching. School leaders should treat teachers as whole individuals by fostering a community based on collaboration and professional inquiry while understanding individual teachers' personal and professional development needs (Kelley et al., 2005). Teacher professional development opportunities include attending conferences, trainings, or seminars to introduce teachers to new ideas that can be replicated within a school environment further empowering a teacher to take the lead to implement innovative techniques in the school.

In addition to professional development, school leaders that prepare staff members to become teacher-leaders positively impact the school environment by amplifying teacher leadership capacity. Teachers are better suited to assume leadership roles within the school when school leaders intentionally focus on building leadership capacity in teachers as well as provide direct encouragement and support for teachers in their new leadership roles (Harris & Kemp-Graham, 2017). Rhodes and colleagues (2009) investigated the effects a teacher-empowerment intervention in schools had on teachers' perceptions of the school environment and their attitudes regarding school affiliation and commitment. In the study's intervention schools, teachers spearheaded school based research, identified school environment issues, developed an enhancement plan in response, and received school leadership support throughout the investigation. Rhodes et al. (2009) found intervention schools saw an increase in teachers' perceptions of the school environment, principal support, and teacher attitudes toward the school compared to non-intervention schools in the study. As a result of the intervention, school

leadership support bolstered perceptions of trust between teachers and school leaders (Rhodes et al., 2009). Harris and Kemp-Graham (2017) noted, investing in teacher-leadership development requires school leaders to relinquish some control to teachers while simultaneously trusting their skills and knowledge as professionals. Additionally, collaborative teacher leadership opportunities deepen the level of trust between colleagues (Carpenter, 2015).

Generate Intellectual Stimulation

Similar to providing development and leadership opportunities, school leaders need to develop school environments that inspire teacher creativity and innovation by generating intellectual stimulation in teachers. Intellectual stimulation occurs when a school leader encourages teachers to rethink instructional delivery and former school procedure execution in order to focus on new behaviors that promote efficiency and success (Pounder, 2008; Robinson & Boies, 2016). McCarley et al. (2016) indicated there was a statistically significant relationship between school leader's intellectual stimulation and the school environment as perceived by teachers. In particular, intellectual stimulation related positively to teacher engaged behavior (0.052, $p < .001$) and negatively to teacher frustrated behavior (-0.013, $p < .05$). Engaged teachers help colleagues and students. They also take pride in their work and the school's success (McCarley et al., 2016).

School leaders offering intellectual stimulation that leads to an increase in engagement also leads to an increase in staff creativity (Thuan, 2019). Strategies for school leaders looking to incite innovation and creativity through intellectual stimulation

include establishing staff collaborative efforts and enhanced teacher reflective behaviors (Blase & Blase, 1999). Teachers in Blase and Blase's (1999) study reported positive effects on motivation, satisfaction, and self-efficacy when school leaders distributed professional literature, encouraged workshop attendance, and held reflective discussions. These strategies created an environment for teachers that promoted an influx of new ideas and a supportive space to hold difficult, uncomfortable discourse about improving teaching practices when needed (Harris & Kemp-Graham, 2017).

Provide Direction and Support

How a school leader implements new initiatives in the form of direction, resource support, and administrative support is crucial to how the school environment develops in response. The introduction of a new initiative or program has a way of taxing systems within a school because new protocols associated with new programming requires teachers to adjust their mindsets and practices, which can be difficult, sometimes causing friction within the school environment. School leaders have the ability to assuage teacher frustration and resistance to change by maintaining a school environment that readily supports teachers and the community through any changes. This was the case for schools in Carpenter's (2015) study where several school leaders from one district implemented Professional Learning Communities (PLCs) as a new initiative to promote shared leadership and professional development in their schools. Multiple school leaders did not establish a purpose, process for execution, or training for teachers on the PLCs which led to tremendous amounts of teacher frustration, eventually leading the school environment to become extremely hostile (Carpenter, 2015). Conversely, in the same study, teachers

responded much better to PLCs when the school environment was perceived as more positive and nurturing, and the school leader had a well-defined PLC plan, provided PLC training as well as ongoing support for teachers (Carpenter, 2015). The difference between the schools and their outcomes rested on the direction and support provided by respective school leaders.

Establish Teacher Autonomy

School leaders that establish a school environment based on teacher autonomy, promote teacher empowerment and choice thereby creating flexible, open schools. Even when inflexible structures are in place, school leadership behavior can mitigate the effects inflexible structures may have on a school's environment. Federal accountability measures, primarily high-stakes standardized testing of students, have negatively impacted school environments (Sheras & Bradshaw, 2016). Von der Embse and colleagues (2016) found increased accountability pressures were associated with increased teacher stress and decreased teachers' perceptions of the school environment. Although a school leader cannot remove accountability testing altogether, they can control how they convey testing importance to their teachers and students.

Professional growth and job satisfaction is enhanced when school leaders allow teachers to assume leadership roles in and outside of the classroom as well as participate in school problem solving (Pepper & Thomas, 2002). Increased teacher professional growth and job satisfaction can be attributed to school leaders viewing teachers as leaders in the classroom and providing facilitative environments to support teachers in their growth. Teachers being entrusted with the responsibility to enact best practices

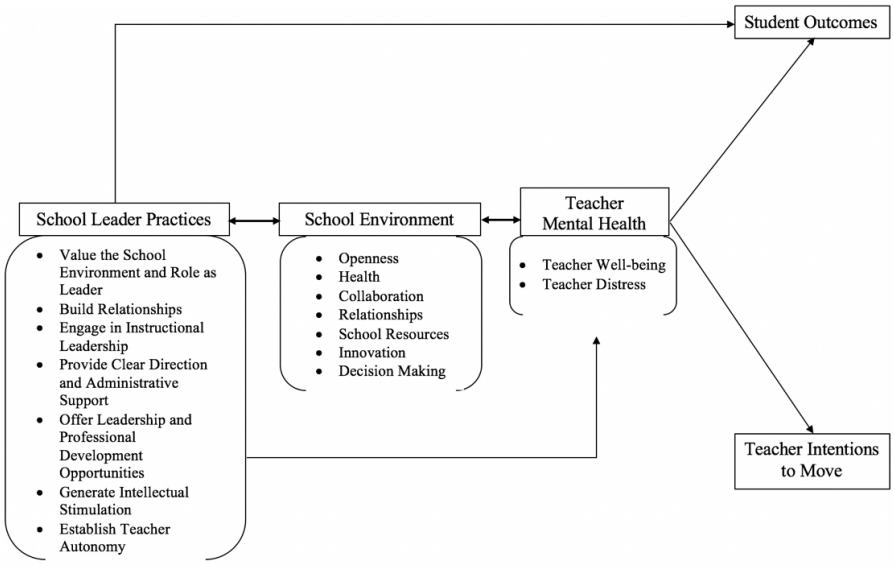
instructionally in the classroom is important for building a positive school environment and creates avenues for increased mutual respect between school leaders and teachers (Bellibus & Liu, 2018).

Conceptual Framework

This study was conceptually framed following relationship pathways found in the school environment. As can be seen in Figure 1, from left to right, I began the study's examination with the school leader as the initial point. I identified specific school leader behaviors or practices found in previous scholarship that facilitated the development of the school environment as positive based on teachers' perceptions. As school leader practices shaped the school environment based on teachers' perceptions, I then provided characteristics and critical dimensions featured in the school environment.

Figure 1

Teacher Mental Health Conceptual Framework



Open school environments are characterized as having free flow of information between school leaders and their school community members both from top-down and bottom-up perspectives, whereas, a closed school environment limits the flow of communication and is generally characterized by top-down communication where the school leader typically shares out information and procedures without the input of other school community members such as teachers (Hoy, 1990). A school environment characterized as healthy is often also characterized as open, yet in addition to being perceived as open, a healthy school environment is highly flexible in its procedures and organizational structure (Hoy, 1990). This flexibility is dependent on the contextual needs of the particular school. Furthermore, Hoy (1990) posited healthy school environments are poised to ward off institutional vulnerability. Meaning, a school leader is able to prevent school affairs from being compromised by special interests of parents or outside community groups.

The dimensions present under the school environment, as can also be seen in Figure 1: collaboration, relationships, resources, decision making, and innovation; stem from Moos' (1973) human environment theory which suggested all the environments an individual is exposed to affect their development either socially, emotionally, or physically within three dimensions: relationships, personal development, and procedures maintenance. Relationships are those peer-to-peer bonds teachers form with their colleagues, as well as those bonds formed with their students. Additionally, the relationship dimension in the school environment pertains to the school leader-teacher bonds. These relationships produce a great deal of support for individual teachers and

help form a perception of the overall condition of the school environment based on maintained relationships. Personal development addresses a teacher's self-initiated development as well as the development encouraged, identified, and buttressed by their school leader. As a result, the personal development dimension, not only focuses on goal setting and achievement but also resource support available to attain developmental standards. Finally, procedure maintenance is critical of how the school environment operates through daily protocols and practices communicated by the school leader to school community members; how protocols are upheld, revised and decided upon; as well as reinforced during protocol break down.

Next in the study's conceptual framework, as can be seen in Figure 1, teacher mental health follows the school environment. As school leader practices influence the conditions of the school environment and teachers' perceptions of it, so too are teacher mental health states influenced by the conditions of the school environment, whereby, the school leader influences teacher mental health by way of the school environment. Teacher mental health in this study was defined by teacher well-being and distress indicators. In accordance with the WHO (2005) definition, mental health is a state of well-being. Therefore to understand teacher mental health, I applied the well-being theory posited by Seligman (2011) which asserted that five elements work together for the benefit of an individual. The five elements of well-being theory: positive emotions, engagement, relationships, meaning, and achievement form the acronym PERMA. The PERMA model is aligned to teacher well-being found below the teacher mental health section illustrated on the conceptual framework, seen on Figure 1. Also, as can been seen

in Figure 1 under the teacher mental health section is teacher distress. Throughout the study, teacher distress referred to experienced symptoms of depression, anxiety, and stress by teachers.

While teacher mental health goes on to influence student academic achievement (McLean and Connor, 2015) and intentions to move (Borman & Dowling, 2008), as can be seen in Figure 1, this study focused on the relationships between school leader practices, conditions of the school environment, and teacher mental health. Conceptually, I examined the practices of the school leader or leaders, commonly known as principal or assistant principal, in developing the school environment at four schools located in one southeastern state of the United States. As can be seen in Figure 1, the practices I looked for in school leaders were all found to positively cultivate school environments for teachers. After examining leadership practices, I sought to further understand the characterization of the school environment as expressed by teachers within respective school settings. Finally, I explored teacher definitions of mental health and their understanding of mental health as it relates to their lives with regard to their school-work environment. Altogether, I integrated quantitative and qualitative data from teachers to demonstrate how the practices of school leaders, related to developing the school environment, explained reported levels of teacher mental health.

Research Design and Methods

Present Study

The purpose of this study was twofold. The first purpose was to understand how the practices of school leaders shape the conditions of the school environment as

perceived by teachers. The second purpose was to understand how those same practices that shape the school environment then explain self-reported levels of teacher mental health. In addition to the study purposes, two goals were identified for the present study. At the conclusion of this study, it was my goal as the researcher to: (a) identify practices of school leaders that cultivate positive school environments and (b) explain the connection between the practices of school leaders and teachers' perceptions of the school environment to self-reported levels of mental health. The research questions that guided the study were:

1. How do the practices of school leaders shape teachers' perceptions of the school environment?
2. How do the practices of school leaders, related to the school environment, explain reported levels of teacher mental health?

The study research design was established as a follow-up study to quantitative research on teachers' perceptions of the school environment and teacher mental health. I utilized quantitative data from a previous study to determine the quality of school environments as well as states of well-being and distress in teachers. As this was a follow up study, I employed an explanatory sequential mixed methods research design to study the mental health and experiences of four teacher participants within their respective school environments.

Participants

Four teacher participants were purposefully selected to participate in the study (Yin, 2018). Based on data from the previously conducted quantitative study, I invited

teachers to participate as critical cases illustrating the following theoretical hypotheses. First, there is a positive relationship between the school environment and teacher well-being. Second, there is a negative relationship between the school environment and teacher distress, which intimates a school environment with a high composite score on the Revised School-Level Environment Questionnaire (R-SLEQ) should yield a high well-being score in teachers and vice versa. Furthermore, a low school environment composite score on the R-SLEQ should yield higher rates of teacher distress and vice versa. Given these hypotheses and available quantitative data, three teachers were invited to participate as their cases aligned with the aforementioned hypotheses. A fourth case was added to understand the context where a participant's school environment, well-being, and distress were all divergent from the study hypotheses.

The four teacher participants were all educators from across the state of South Carolina (SC). Two participants were elementary teachers, one was a middle school teacher, and one was a high school teacher. Participants' ages ranged from 28 to 64 years old. Years of teaching experience among the participants ranged from between five years to over 20 years. All participants worked in their current school for at least two academic years at the time of the study. Participants' educational backgrounds and certifications ranged between undergraduate degree to terminal degree. One participant was a National Board Certified Teacher and another participant entered the teaching profession as a second career with an alternative teaching certification. I intentionally diversified teacher participant backgrounds based on certification, degree attainment, age, teaching

experience, and school levels to observe any potential nuanced details or experiences based on such diversification.

Data Collection

I collected study between April and May 2020 with all four participants. Due to COVID-19 restrictions, I held all semi-structured interviews with participants on an individual basis via the internet platform Zoom. Semi-structured interviews addressed concepts of teacher mental health, the conditions of the school environment and examples of school leader practices. Participants' interviews ranged from 25 minutes to 75 minutes in length. The average interview time ran approximately 50 minutes. The semi-structured nature of the interviews allowed participants to share as much or as little information as they felt necessary during the interview. With participant permission, all interviews were recorded for accuracy.

Data Analysis

At the conclusion of the interview data collection process; interviews were cleaned, transcribed verbatim, and blinded for security purposes. As the researcher, I relied on theoretical propositions and case descriptions as general analysis strategies (Yin, 2018). I conducted iterative cycles of open-coding and memoing to determine emergent thematic patterns (Miles et al., 2014). I identified initial codes and patterns using NVivo software. Furthermore, I practiced explanation building (Yin, 2018) to address the second purpose of the study which was to explain reported levels of teacher mental health based on conditions of the school environment created by school leader practices.

I developed theoretical propositions early on in the research process from a systematic literature review I conducted. The first theoretical proposition was: a teacher's perception of the school environment is influenced by the practices exhibited by the school leader. Building upon this, I then developed two additional theoretical propositions related to teacher mental health, the school environment, and school leader practices. I posed the following propositions to address case studies of teacher well-being and distress: 1.) A teacher case study will report higher levels of well-being when school leader practices are associated with creating a positive school environment and 2.) A teacher case study will report higher levels of distress when school leader practices are associated with creating negative school environments. From these three propositions, I framed the research conducted in this study including case selection and analytical approach.

I initiated the data analysis process with open, inductive coding where I broadly identified codes using three general categories: 1.) Teacher mental health2.) School environment (SCHENV) and 3.) School leader practices (EDLPRX). I then examined each code to identify (a) antecedents or what preceded the feeling, description, and practice as well as (b) consequences or effects the feeling, description, and practice had on participants. Next, I developed a codebook to initiate the deductive coding process.

Following the deductive coding process, I performed explanation building to explain reported levels of teacher mental health based on their school environment and school leader practices related to creating the environment. As such, I used coded data from each case as evidence to support each theoretical proposition. I also compared data

within cases against “Ideal SE” and “Ideal EDLPRX” codes. I then compared data from cases to case while building a cross-case analysis data table. Throughout this process I welcomed emergent themes to arise across the four cases.

Findings

In the following section I provide a description of the four selected cases. I describe background information for each participant as well as school setting contextual details. Within this brief description, I share participant scores on the Workplace PERMA Profiler (WPP) which measured teacher well-being and the Depression Anxiety Stress Scales-21 (DASS-21) which measured teacher distress. I provide the evaluation scores for each participant’s school environment as assessed by the R-SLEQ. Furthermore, in this section I illustrate teachers’ perceptions of their school environment in relation to the practices of the school leaders they believe facilitated its development. Finally, I present findings used to understand how school leader practices that influence conditions of the school environment then explain teachers’ self-reports of mental health as : The Little Things, Alignment and Balance, Lighten the Load, and Internalization to Initiation.

Elaina Bloom

Mrs. Elaina Bloom is a 64 year old, White female with a graduate degree in education. She has over 21 years of teaching experience. At the time of the study, Elaina was teaching at a middle school in a large, mostly affluent suburban school district. She considered her school an “outlier” with high rates of poverty, compared to others in the district, despite not being classified as a Title I school by National Center for Education Statistics (NCES).

Elaina was happily teaching at her school site for several years until her school experienced a major change. Two years prior to the study, Elaina's former principal retired and the school district filled the position with a new administrative team. Elaina believed her school environment's morale was extremely low, this belief was further supported by her R-SLEQ survey results. Elaina indicated her school environment was a 2.33 out of a possible five points. Despite her moderately average well-being score of 7.50 out of 10, she reported high levels of distress. Her total distress score fell within the severe range. As a result of her scores, Elaina met the second condition for selection criteria and was considered a critical case due to her low school environment and high distress scores.

Environment Shaping Practices

Advantageous. Though Elaina was unable to express advantageous practices of her current school leader, she was able to affectionately articulate a time her previous school leader positioned people at the center of their work. When speaking about her former school leader Elaina said, "She believed in a big tent … If the district had to put somebody in a portable on our school grounds, she would bring them in and invite them to every lunch." Elaina spoke highly of her former school leader, in large part because of how she treated teachers and staff. Elaina also recounted how her school leader would even "bend over backwards" for visiting teacher interns from nearby colleges and universities. For Elaina, her former school leader's ability to build relationships and care for others was an advantageous practice to create a positive school environment. As Elaina stated, "She could not have done it any better." Elaina's former school leader's

enduring positivity was felt throughout the school environment where teachers were happy to be in her presence as well as a part of her staff.

Disadvantageous. As noted, Elaina experienced a recent shift in her school environment. With the retirement of her previous school leader, a new regime was ushered into the school environment. At the time of the changeover, Elaina also noticed several new mandates being pushed down from the federal, state, and district levels. The mandates focused on strict testing accountability and an increase in unannounced classroom observations. Elaina said, "When the new mandates came down that you go into classrooms and observe unannounced all the time… the new administration came in and used it kind of as a weapon" whereas her previous school leader was thought to be much kinder in providing feedback. Having grown accustomed to constructive feedback after observations from her previous school leader, Elaina did not feel as though the new weaponized observations were helpful for her as a professional or for the quality of the school environment. As a result of the unfriendly observations, Elaina and other teachers observed a decline in the their once positive school environment. Her school leaders made the school environment unpleasant to the point Elaina stated, "a lot of people left."

The increased attention on stringently adhering to mandates and focusing on testing led to impersonalized teacher development. Elaina felt as though her school leader's "hands were tied by all that testing." Elaina was confident her school leaders wanted to improve instruction at her school but she thought "they're going about it the wrong way." Instead of supporting teachers to become stronger and more efficacious

instructors, development efforts predominately centered on testing preparation and raising testing scores.

Elaina's school leader's previous teaching experience was a pivotal factor in what Elaina perceived as favoritism. She mentioned her school leader's teaching background as a former related arts teacher has caused some discord within the school:

> It seems like she really looks out for the related arts areas, you know make sure they get their lunch time and they don't have too many duties and that creates a lot of friction with the classroom teachers who can't even get a breath… you know walking by the library which closes for their lunch hour or 45 minutes I guess and see them sitting there enjoying their lunch and talking with their peers and knowing that we don't even get to go to the bathroom unless we have somebody to watch our kids kind of thing.

The ability to take a moment to herself throughout the day without needing to find coverage was a privilege not afforded to Elaina as a classroom teacher. Yet, seeing colleagues without a self-contained classroom to supervise able to do so was perceived as unfair to Elaina, especially, when the school leader was a former related arts teacher herself, like those freely available to enjoy lunch in the library.

Explaining Teacher Mental Health

The Little Things. Elaina defined mental health as the management of stressors. Her number one coping strategy to manage her stress was "having a place to vent about stressors, so they don't burden you." Elaina found great joy and meaning in the professional relationships she managed to form with her colleagues. She believed they

are important, naming professional relationships one of the great satisfactions in the entire profession. She even found her time in the semi-structured interview as “pretty satisfying” further alluding to her need to talk about her stressors in order to maintain her own mental health.

Building relationships for emotional and professional support was an essential coping strategy for Elaina. The absence of these relationships due to teacher departures at her school limited her ability release stress and prevent it from building up to “burden” her, which she believed could lead to a lack of mental health. Relationships were deeply important to Elaina because they provided her emotional outlets to safely unload the burdens of her stressors. Forming collegial relationships became a highlight for Elaina under her former principal, then, with the school environment shift and teachers leaving due to the changes, her school-based relationships with her colleagues dwindled. Moreover, the opportunities to form new relationships seemed rare under the new school leader.

Second to relationships, Elaina needed to feel her school leader acknowledged the demands placed on teachers and their humanistic needs. The finding “The Little Things” refers to a school leader doing small acts that recognize the human side of the teaching profession. In large part; recognizing the need for connections, trust, and relationships, as well as basic human needs such as a moment to oneself or to attend to a personal matter outside of the school building should it arise. Elaina wanted a school environment where she felt connected to her leaders and colleagues as well as an environment in which she believed she was cared for like a professional and a human. Without the connection to her

school leader and with the experiences of an authoritarian leadership style that overlooked human needs, Elaina felt frustrated and displeased with her school environment.

Alignment and Balance. When asked to define teacher mental health, Elaina mentioned her concern for her colleagues and future teachers joining the profession. She shared the changes she experienced after years in the profession, in particular those that involved multi-tasking and balancing her schedule. Elaina explained, "Teaching is not a 60 hour a week job. At minimum and that's just not even doing the intricate grading that really needs to be done." Dedicating her entire Sunday to lesson planning and grading prevented her from tending to the things in her personal life. The inability to manage "stuff that comes up during the school day" also proved to be a source of frustration for Elaina because she felt her school leader was unaccommodating in this sense, further throwing her work and her personal life out of balance.

In terms of alignment, Elaina derived a great deal of satisfaction from the relationships she formed with her colleagues as evidenced by her relationship well-being score of 10 out of 10 on the WPP. Even though Elaina stated how much relationships with her colleagues incited joy for her, she rated her school environment's collaboration poorly at 1.83 on a 5-point scale. When asked about how her school leader seeks to facilitate collaborative experiences and relationships among staff in the school environment, Elaina simply stated:

> She does not, and if she does it is not authentic. It feels like a check list item to mark… If they're delivered with the intent of like the old principal did, the intent

> that I want my teachers to make friends, but it's just like a 'I have to do this' … it was like a check off a list. You can tell the difference.

School leader intentionality when building relationships is critical. Elaina recognized a difference between each school leader's approach to school collaboration and was unsatisfied with what she believed to be a disingenuous approach to fostering school relationships.

Lighten the Load. On the DASS-21, Elaina's distress score was within the severe range, indicating she was extremely distressed. Despite a relatively average well-being score on the WPP, Elaina still felt work related stressors impacted her saying, "I can definitely feel the stress of the years in my body. Especially, you know, it just got to be more and more." Throughout the interview she explained the need for additional support from her school leaders.

When asked what changes she would make as a school leader for a day Elaina shared, "Assign each teacher like a couple of aides per grade level to go in and give teachers a five-minute break which would go a really long way too… if you know the teacher had a five hour stretch." Years of stress accumulated in Elaina's body and her ideal school leader's practice was to schedule five minute breaks for teachers. The finding "Lighten the Load" to Elaina meant more than covering her classroom for a break. She sought a leader that recognized the many roles a classroom teacher takes on solely and offered additional support or resources to manage those duties as one individual.

Internalization to Initiation. Elaina mentioned the accumulating stress she physically felt in her body as her teaching career continued. She named the weaponized observations under her current school leader as one of the most notable school leader practices that caused a shift in her school environment. In addition to the observations, Elaina thought her authoritarian leadership style, perceived favoritism, and "check off the list" relationship builders as other practices that caused her to view the school environment as negative.

Even though Elaina witnessed her colleagues leave the school because of the new leadership and a decline in the environment, she chose to remain at the school. However, during the 2019-2020 year, Elaina found it increasingly difficult to continue in her school environment. Her exposure to a negative school environment prompted the need for change. Elaina shared, "I would've gone another year if I could've transferred or you know the other principal was there, that would've given me the round number of 25 years. I just decided it wasn't worth it. I decided to retire."

Two aspects of Elaina's statement are worth unpacking: first, the effects of school leadership and second, the decision itself to retire. Had Elaina worked for another school leader at another school site she may have considered returning to the classroom in the 2020-21 school year. Alternatively, if her former school leader whom she thought "believed in a big tent," "was a positive leader," and held a number of similar values as Elaina was still the school leader, she would have remained at her school and in the profession to reach 25 years of teaching before retirement. Instead, her negative experiences in the last few years under her current school leader led Elaina to the

impression “it just wasn’t worth it.” The idea to continue teaching and reach 25 years of service was no longer worth the energy because she had endured and internalized a negative school environment for too long, much longer than she felt it was worth, therefore she initiated the retirement process to leave the school and ultimately the profession. Of particular note, Elaina made the decision to retire prior to the global pandemic when schools overhauled teaching practice to entirely online instruction as a safety measure.

Lauren Greenleaf

Ms. Lauren Greenleaf is a 28 year old, White female with a graduate degree in education. She has taught for five years and is teaching in her third year at her current school. Lauren teaches at an elementary school classified by NCES as Title I and in a suburban area. Lauren described her school environment as “pretty poor” to low average in quality. Based on the results of her R-SLEQ, her school environment was considered average among the sample data set of 250 teachers evaluated at 2.90 on a 5-point scale. Lauren’s well-being score on the WPP was also average among the same data at 7.10 on a 10-point scale. Her distress score fell within the mild range on the DASS-21. Given a string of average scores, Lauren was selected to participate as an average-average critical case, where her school environment, well-being score, and distress scores were all considered average among the sample population.

In the words of Lauren Greenleaf, mental health was “the ability to find balance between stress and coping.” She elaborated that it is the ability to “bounce back” and “pull yourself out [of a low].” As she defined mental health, she recognized all

professions, teaching included, have highs and lows that can last days or weeks. She went on to say the cardinal indicator of knowing whether or not a person has found balance between the two was, “Can you go into school every day and be effective without also coming home and having a breakdown?” Having the ability to “bounce back” and recover from stressors in one’s work life without falling too far into an emotional pit was crucial to Lauren in maintaining her own mental health. As a teacher who believed her school environment was fairly poor and scored her environment as average, albeit on the lower end of the average scores among survey results, she identified ways to routinely stay fit mentally and emotionally within the context of her school environment.

Environment Shaping Practices

Advantageous. While Lauren described her school environment as “pretty poor” in terms of its quality for teachers, she was unable to identify specific advantageous practices her school leader displayed that benefited the development of her current school environment. Despite this inability, she was able to identify ideal practices she believed, based on previous teaching experiences, her school leader could implement to generate positivity within her school environment. She wanted to see her school leader more often during the school day. An opportunity to see her school leader on a consistent basis throughout the building was viewed as advantageous as it could lessen the “gotcha feelings” she and most teachers in her school experienced when they eventually saw the school leader. The “gotcha feeling” incited a momentary feeling of guilt in teachers and was highly associated with other negative experiences. Teachers, including Lauren,

questioned themselves wondering if they had done something wrong or they were about to be subjected to a highly critical classroom observation.

Lauren believed increased visibility would help school leaders build relationships with teachers and students as well as decrease teacher negative feelings associated with seeing school leaders infrequently. At the time of our interview, Lauren had mixed feelings toward the attempts her school leaders made to carry-on conversations. She ultimately found the exchanges to be "disingenuous" and "superficial." Lauren further noted that she would like to have relationships with her school leaders and colleagues because she thought they would lead to a more positive, collaborative school environment. However, the limited visibility and blunted conversational exchanges tended to expose areas of improvement for her school environment and school leader's practices.

Disadvantageous. During our interview, Lauren shared a story she found to be wildly disheartening yet very reflective of her school leader's practices. As a veteran teacher, Lauren served as a teacher mentor to a first year teacher at her school site. She depicted the scene of an excited first year teacher arriving to school her first day. As her mentee approached the school building she was met by their school leader, with gusto the mentee suggested to the school leader that they have upbeat music to welcome students in the morning at the car rider line. Immediately, the school leader told her, "No" then walked away. A resounding, "No" by the school leader without an opportunity to make a case or discuss logistics was considered common for Lauren and her colleagues. She

believed her school environment lacked innovation and that ideas were often snuffed out by their school leader.

If it was not teachers' ideas being held to a minimum, it was teachers' voices. Lauren recalled a meeting for the school's PTA saying:

> School members aren't necessarily included except if it's something, that's mandated… We're included in the budget meeting but it's kind of made clear, your voice and ideas are here because it's a necessity and we're not necessarily going to take them into consideration.

Lauren was discouraged by the attitude upheld by her school leader with regard to teacher inclusion. It meant that for Lauren and her colleagues, an invitation to be present at the meeting was not an invitation to voice their ideas in the school decision making process.

Explaining Teacher Mental Health

The Little Things. The lowest score on the WPP for Lauren was the relationship element at 5.67 out of 10. Without directly stating how important relationships were to Lauren, the notion of bonding with colleagues, school leaders, and students arose on multiple occasions. Lauren once attempted to share stellar news with her school leader about a student but the story had little impact as her school leader did not know of the student. Lauren continued with, "So when you want to talk about a positive a student has done, a lot of times, the admin staff doesn't know who you're talking about." When her school leader did not have the slightest idea who her student was, she was disappointed and thought something so little as to know a student's name or who they were could have made a tremendous impact. Instead, her school leader's miscue pointed to a number of

other “little things” her school leader had yet to do. When asked about how her school leader recognizes accomplishments in the school setting Lauren shared:

> We don't necessarily have a lot of teacher celebrations. We do our teacher of the year vote, but even then, when that teacher's announced, it's kind of just an overall, end of the day, over the announcements, like, "Good job," and that's kind of it.

In an ideal school environment, Lauren would like to see her school leaders celebrate the accomplishments of students and teachers. Celebrating is a joyous time to recognize the work of others, rather, celebrating in Lauren’s school was either left to the planning of classroom teachers or a flat, announcement at the end of the day. The absence of celebrations or teacher recognition led Lauren and her colleagues to feel as though their work was unimportant. Lauren wondered if her school leader truly understood the work and role of educators. She wanted her school leader to express a better awareness for the teaching profession:

> Understanding that teachers went into the profession for a reason. We have a basic understanding of our students. We are your first line of response. We need to be shown that we're respected, that we're cared for and I think that would just do wonders for schools, in general. School leaders and admin, making a concerted effort to know their teachers, to know their students, to know the staff, just care for them.

Lauren imagined what her school environment would be like if her school leader led from a place of understanding, respect, and care. As Lauren envisioned her ideal school she

knew the tremendous impact a compassionate school leader could have on teachers and students.

Alignment and Balance. Lauren considers herself to be a hard working professional who is willing to be flexible with her time and to perform all her duties as a teacher. She also emphasized the need for balance to foster mental health because as a teacher, "You put in all the hours at work teaching then bring work home to lesson plan, grade, or respond to emails." Although she was comfortable sacrificing some of her personal time to feel "caught up" at work, she knew there was a fine line between being asked to sacrifice that time and being demanded to sacrifice time. Lauren said the phrase "and other contractual obligations" was spouted often by her school leader when an attendance mandated event would occur at her school. She did not mind attending the events as she felt this gave her an opportunity to meet families from the school community, however, what bothered Lauren most was feeling as though her school leader believed her time was their time. Lauren exclaimed, "My time is not your time!" She held steadfast in this position as she believed she had already found a way to balance working from home on occasion. Furthermore, she thought extended hours at school late into the evening, several nights out of the week limited her ability to accomplish the school-work balance she required to not be "run down" from the job.

Lighten the Load. The classroom and cafeteria are two high profile areas in the school where frequent student discipline issues take place. Student discipline is a known stressor for most teachers (Davidson, 2009). Despite not being classified as a "highflyer" for discipline at her school, Lauren still found herself in situations where student

discipline required school leadership to intervene. Lauren expressed, “When I call for assistance it is usually for a major offense or something completely out of my hands.” As Lauren had an extremely disruptive student in class one day, she went through her normal class management techniques to no avail as her student was unable to successfully rejoin class instruction without causing a disturbance. Lauren messaged the front office for administrative support and was told her school leader would arrive at her room within a few moments. Lauren stated, “Time passed and no administrator came to my door, thankfully our school counselor stopped in after leaving a guidance lesson to remove the student for a cooling off period.” In this instance, Lauren needed support and a school leader to help ease the stress of regaining classroom control due to a disruptive student. After being told help was on the way, she felt comfort knowing assistance was forthcoming, yet her school leader never arrived or acknowledged her request for assistance at the end of the day, which led to feelings of mistrust for Lauren.

Internalization to Initiation

Lauren was the first participant to introduce the concept of school environment internalization and the effect internalizing one’s school environment can have on an individual. She voiced:

> I think I internalize the fact that our environment isn't very high and I can see a lot of the problems. And knowing that they're not necessarily problems that I can change or do a lot about, it really kind of stresses me out.

As time went on, school environment conditions were “making me see a lot of issues and stressors that I feel like if I was happier or satisfied with it, I wouldn't necessarily see or it

wouldn't be such a big deal," said Lauren. Instead of accepting issues in her school environment, she decided to initiate a program to combat the negativity she was experiencing. Lauren approached her school leader with a plan to start a first year teacher support group. It was an opportunity for new teachers to mingle with veteran teaches and discuss what was happening in the classroom in their role as first year teachers. Lauren explained first year teacher meetings provided a safe space "to talk with those teachers who haven't really felt they've had an outlet otherwise." Lauren found an avenue in her school environment to satisfy a need within the school community and in her professional life as someone who highly values collegial relationships.

Helena Golden

Mrs. Helena Golden is a 37 year old White, female with an undergraduate degree in teaching. She has taught for 14 years and is a recognized National Board Certified Teacher. Helena is in her ninth year teaching at her school site classified by the NCES as a rural-distant, Title I elementary school. She described her school environment as extremely positive. Helena indicated her school environment as an overall 4.48 out of a possible five on the R-SLEQ. She also rated her overall well-being was high at school with an overall score of 9.13 out of a possible 10 on the WPP. All distress indicators from the DASS -21 were within the normal range. As Helena's school environment was ranked high and her well-being score was high, she was selected to participate as a high-high critical case for this study.

Environment Shaping Practices

Advantageous. Helena spoke with excitement as she described her school environment as "rare." She equally spoke highly of the work her school leaders—principal and assistant principal—performed in order for her school to maintain such high teacher retention rates in the district. Nearly 50% of Helena's transcript was coded as advantageous practices. She discussed the small details and acts of kindness her school leaders displayed to "take care of their people." She described the well-communicated school mission and vision, sharing, all school leader practices were in support of the mission and vision. She stated it helped provide a "people focused" and "shared school community" atmosphere. Helena expressed her school leaders and members of the school community believed in collective leadership where her school leaders implemented a collective leadership model. This model promotes teacher inclusion in school decision making.

Helena's school leaders prioritized instructional leadership. Her school leaders frequently visited classrooms to observe teacher instruction. Often times during classroom visits, the school leaders would leave a message of praise regarding the teacher's instruction along with constructive feedback. Helena's school leaders offered targeted resources and strategies teachers could use in their classroom. Her school leader often suggested professional development courses to teachers based on their content areas or interests. When available, Helena's school leaders would fund teacher travel and registration to professional conferences. Her school leaders created a flexible schedule permitting teachers to engage in "learning walks" throughout the school building. This

provided an opportunity for teachers to learn new teaching strategies in their own building as well as update a school wide Google document highlighting what they saw on each learning walk for the teaching community to view.

Helena indicated her school leaders encouraged the development of teachers as professionals and created a "no fail culture." Her school leaders supported her along with her colleagues in new endeavors under the premise each endeavor was purposed to help students academically, socially, emotionally, or behaviorally. It was also expected new endeavors were intentionally designed to support the mission of the school community in its entirety. Furthermore, her school leaders emphatically backed teachers' new ideas and wanted teachers to feel fully supported in success or even failure. With purpose driven initiatives, Helena's school leaders consistently sought opportunities for growth while looking for new ways to improve the school each year saying, "We're about being better than we were last year."

Helena's school leaders were constantly "keeping a pulse" on the atmosphere of the school. She explained her school leaders were aware of the school's "spirit" and when the school environment felt off, teachers seemed frustrated or dispirited, her school leader would rally the school staff into the library to "check-in." He would ask teachers to "share their why [for becoming teachers]" and implored teachers to relay ways in which he and the leadership team could assist. His line of questioning was dependent on the needs of the school environment. Her school leader valued the conditions of the school environment by "keeping a pulse" on it. In doing so he was able to intervene to support

teachers when they needed it most as well as inspire the staff to raise the morale back to their usual levels.

Disadvantageous. Although Helena's transcript was filled with positive, advantageous school leader practices thought to create her positive school environment, she did take a moment to discuss a practice that she believed to be disadvantageous to any school environment: perceived favoritism. Helena stated, "When you start looking at the culture of a school there shouldn't be a select group of people that always get a yes and then a certain group of people that always get a no." She went on to say how toxic a school environment can become because favoritism leads to distrust between colleagues as well as between teachers and school leaders. She shared at her school, "It's not like a secret club. It is a fully included culture where everyone has a part… and we couldn't do it without every single person that's there, kids included." Helena knew how divisive and detrimental favoritism in the school environment could be as she acknowledged the importance of each school member in reaching success.

Explaining Teacher Mental Health

The Little Things. Helena repeatedly mentioned "the little things", practices her school leaders enacted to accommodate teachers in the school environment. Initially, she discussed how her leaders would bring lunch to teachers or stock additional food related treats in the teachers' lounge. Her school leaders found subtle ways to show teachers they were appreciated by covering teacher lunch duties. She added in excitement, "Oh my gosh such a novel thing, to just be able to eat and not shove it in your mouth and talk to grown-ups." She mentioned her school leaders paid attention to school community needs.

When colder weather arrived and teachers had outside duty, school leaders offered thoughtful ways for teachers to stay warm and comfortable after duty. Helena smiled and said, “Those little things… it makes all of it a little more enjoyable. And I think they knew that too.” While these acts did not affect the instructional or school environment directly, they did indirectly impact the quality of the school environment for Helena and colleagues.

Whether providing food for teachers, covering teachers’ lunch duties, or bringing in health care workers to support teacher self-care, school leaders at Helena’s school implemented practices that brightened the school environment for teachers. By enacting the little things that addressed the whole teacher. Helena’s school leaders constructed a warm and caring school environment. In doing so, the school environment went on to increase well-being and decrease distress in Helena. The small acts of consideration towards Helena and colleagues enacted by school leaders, showed daily support for teachers and fostered a positive school environment.

Alignment and Balance. “Teacher mental health is big picture of what your purpose is…finding that balance between you as a professional and you as a person,” shared Helena. She believed mental health centered on purpose and balance. Having a purpose in what you do professionally and fulfilling that purpose through your work. On the WPP, Helena, rated her meaning at 9.67, suggesting much of the work she performs with her students in the classroom and as a colleague activated experiences of meaning in her professional life. She stated, “Finding a place that fits you” a work environment that “challenges you yet pushes you to be the best version of you is important to maintaining a

healthy state of mental health." She thought her school leaders had diligently worked in concert with school staff to establish an authentic school environment based on collective leadership principles. Given these school environment conditions, Helena felt fulfilled as an educator and was able to confidently lead her classroom while simultaneously possessing the means to balance her work and personal life.

Lighten the Load. Helena frequently cited the ways in which her school leaders constantly implemented initiatives to help "ease the burden" of teaching in the 21st century. When her school leaders received word of a new district protocol, they would first align the protocol to the mission and vision of the school. After developing a plan to fit district protocol as well as the school mission, Helena's school leaders then disseminated the protocol to teachers. Helena stated her school leaders' final words of advice were, "Make it what you need it." Rather than communicating the school district's new protocol mandate and placing full responsibility on teachers as classroom leaders to execute with little guidance, Helena's school leaders initially accepted the mandate, aligned the mandate to school needs, then released the mandate to the teaching community that they could implement the mandate as needed. Helena went on to say, "they knew it would be a lot of work, but they wanted to support us first that we could all make the move." Easing the burden does not mean accepting the whole burden to completely shield teachers from stress, rather, easing the burden helps lighten the load to ensure all can carry the weight in an efficient and effective manner that works for everyone, the district included.

Internalization to Initiation. In a "no fail" environment, one where teachers are supported in success and through failure, teachers like Helena are inspired to experiment with implementing new ideas, strategies, and initiatives. After attending a professional development day at Ron Clarke Academy, an opportunity sponsored by her school leaders, Helena wanted to build upon the collective and inclusive school environment present at her school by introducing the house system. The house system was her "baby." She presented the idea at the collective leadership meeting and began structuring a system of four houses: red, blue, green, and yellow. She then evenly distributed students and teachers from kindergarten through fifth grade as well as non-certified staff into the four houses. Knowing the environment at her school embraced new ideas and provided the metaphorical nutrients to further grow ideas, Helena internalized the generative nature of her school environment whereby she felt empowered to both bring her new, reimagined house concept to her school and logistically implement the system to fruition. Thinking of the house system at her school as her baby conveyed the importance of her project and the immense sense of pride she had for the initiative. Helena successfully organized the system and was able to witness the positive effects the new initiative further had on her school environment as well as the people within it as she stated:

> And so, that's trickled down into, if we're truly a leadership school, then all our kids… Everyone has the opportunity to lead. That goes from bus drivers, cafeteria workers, janitors, the nurses, the librarian. It is every one of those people on our staff is a member of one of the four houses. So, this is not just a teacher and classroom thing. This was the entire school.

The success and impact of her house system was a mighty accomplishment for Helena, which was also reflected in her high achievement score (9.67) on the WPP.

Dr. Angela Citrine

Dr. Angela Citrine was the final participant of the study selected as a case with the potential to provide nuanced context to the environmental effects on teacher mental health. Her survey results did not align with the hypotheses of a previous quantitative study. Angela is a White, 52 year old female with over two decades of teaching experience. Originally certified with an alternative teaching certificate, Dr. Citrine went on to complete a terminal degree in education. She was a high school teacher at a large suburban high school and in her ninth year of teaching at her school. She felt the school environment has always been a "fairly positive" atmosphere. On the R-SLEQ, she rated her school as 3.48, which was slightly above average among 250 teacher survey responses. Angela's overall well-being score was slightly below average at 6.00 out of 10 on the WPP. Her distress score was considerably high compared to other participants in the current study. Angela's high distress score fell within the extremely severe range. Her high distress score and low well-being score in combination with an above average school environment classified her as a special case to help collect additional contextual information leading to her divergent results.

Environment Shaping Practices

Advantageous. Teaching in a large high school presented its own set of advantages for Angela. All teachers were grouped together in classroom locations by their content areas or particular grade level. Although the physical classroom

arrangements did not allow significant opportunities for teachers to interact with one another throughout the building, the openness and independence of the student population on campus was a perk Angela enjoyed. Angela's school leaders leaned into the independent atmosphere of the school as "they pretty much leave you be." She knew what her school leaders expected of her and the standards she needed to meet. The laissez-faire approach suited the high school operation adding to the positively perceived school environment.

In addition to the school leaders' approach to managing and supervising teachers, Angela appreciated the introduction of PLCs by her school leaders:

> This year we started the PLCs, and so when a new teacher comes in, or teachers that maybe have problems or maybe have trouble with their content area, or teachers that have three or four different plannings, they are able to sit with people of their own content area and do lesson plans and offer support.

She found the communities to be helpful for the professional development aspect as well as the allotted time and space to collaborate, engage, and socialize with other professionals in the building.

Disadvantageous. As an exceptional case, whose data was divergent from previous research hypotheses, Angela's account of disadvantageous school leader practices were very specific to her as a teacher. Angela, in large part, believed her school environment to be positive, however, her school leader permitting institutional vulnerability to occur at the classroom level created a difficult situation for her that carried out over the course of the year. In typical cases, unreasonable parent demands or

community groups can cause institutional vulnerability by school leaders giving way to vested interests over the needs of school members. Here, Angela became negatively impacted by a form of institutional vulnerability when her school leader chose to place Angela on an improvement plan based on an unfounded student complaint.

Coupled. One surprising form of leadership practice arose in two of the four cases. Lauren and Angela, both presented the idea of coupled, neutralizing practices. School leaders had the tendency to couple an advantageous practice with a disadvantageous practice. For example, Angela shared, "He'll want the school to work together on things but only allow the same people to work on the task force." Although, Angela was teaching in an above average school environment and described her school as "fairly positive", she explained the inclusion of all teachers was a positive for unifying the school. Yet, selecting the same faculty members for initiatives was seen as a negative because it did not truly unify the school as intended, nor did it offer an inclusive opportunity for everyone. In Angela's example the coupled practice was not necessarily viewed as advantageous or disadvantageous because the combination of practices offset one another in their contribution to the school environment. Carpenter (2015) had a similar finding where school leaders implemented PLCs to promote collaboration and increase perceptions of the school environment, however, the positive intent of the initiative was negated in some schools due to little or no administrative support.

Laruen Greenleaf shared a similar example when her school leader began an advantageous practice, yet counterproductively offset the practice with negative practice in micromanagement. In an unexpectedly positive move, Lauren's school leader greenlit

her initiative to start a first year teacher program at her school. Lauren set out to provide a safe space for her new colleagues, by meeting monthly to discuss any concerns they may have and offer emotional support towards one another as they settled into their positions. She and her colleagues were excited about the group and veteran teachers volunteered to serve as informal mentors for the "First years." Lauren arranged the opening first year teacher meeting and looked forward to the possibilities of the group, until she felt her school leader "wanted a pulse" on the group in the wrong way. Instead of being supportive, she said "He was commanding, [with] the boss-type vibe." Despite allowing the group to meet as an initiative to support new teachers safely, the "boss-type vibe" Lauren's school leader entered the meeting with was viewed as unsettling to some of the first year teachers. A few teachers left the group sharing "they didn't feel like it was a place to share things" whereas more first year teachers stayed because they welcomed the idea, at the very least, of getting to know other colleagues in the building.

Coupled practices were not exemplified in all cases, rather these two cases presented a surprising opportunity to showcase the impact an advantageous practice paired with a disadvantageous practice could have on a teacher's perception of their school leader and school environment. Of note, some coupling may be more disadvantageous over time, similarly to Lauren's example than neutralizing as demonstrated in Angela's case. Angela remained indifferent in her example, whereas the first year teachers in Lauren's example voiced feeling unsafe in a space meant to be safe. School leaders in each example would benefit from knowing the detrimental effects of

pairing a practice initially viewed as positive with an action that may detract from the good they started.

Explaining Teacher Mental Health

The Little Things. After a classroom observation was conducted as part of her improvement plan, Angela's school leader held a review meeting. Unbeknownst to her school leader, Angela recently returned to school after being unexpectedly treated at the hospital for an urgent medical condition between the observation and review date. Angela shared:

> I was in the hospital on Saturday…almost had to have surgery. I come back and the next week he wants to go over my observation with me and said I did not do a good job… I had to do another.

Angela complied to a second observation and informed her school leader she was still recovering from a recent, unexpected hospital visit. As she told him, he had no response with regard to her hospitalization. Angela described the moment saying, "It's like it did not even faze him any, so that was just … that kind of breaks your spirit sometimes, you know?" Angela shared a real personal concern for her health and experience at the hospital while her school leader instead focused on the administrative task of an observation.

The finding "The Little Things" pertains directly to a moment such as this. Angela vulnerably divulged key pieces of health information only to be met with a callous, emotionless response. In her definition of mental health Angela spoke to the need for administrators and colleagues to remain "cognizant of who you are as an individual."

This awareness also pertains to an individual teacher's life outside of the school building. For Angela that meant acknowledging she was in the hospital and that as an individual, a human-being, her health was in jeopardy. As a school leader, missing the opportunity to show individual consideration, doing the little thing to recognize Angela's vulnerability as one of his staff members, impacted her in a great way. Overall, she described the moment as "quite spirit breaking" from the handling of a student incident to classroom observations and health concerns. Failing to enact the small gesture of consideration, completely altered the way in which Angela viewed her school leader, her year as a professional, and her outlook on her mental health as a result.

Alignment and Balance. Angela attributed mental health to "feeling good about who you are and what you do at school." Although Angela scored her well-being low on the WPP, her engagement score was her highest at 6.67. As a high school English teacher, certain topics and school related activities heavily aligned with Angela's passion and therefore contributed to her overall mental health. She felt good about herself as an educator every time the Edgar Allen Poe unit was on the teaching calendar. As we discussed her engagement at school, she immediately perked up in demeanor as she explained how she often lost track of time during a Shakespeare unit as she said:

> This past year [teaching sonnets] for Macbeth, for Shakespeare, I had gotten so involved in trying to get the kids to do all these activities of standing up and stomping out the beat to iambic pentameter where I go, ok we only have like 10 minutes left… I was so busy teaching the instructional part of it I didn't have time to finish up the assessment.

Subjects such as Shakespeare and Poe allowed Angela to experience flow to where she became fully engaged in the instruction and highly enjoyed the lessons.

When asked how she would create the perfect school environment Angela shared, "I would give every teacher a course that they wanted." She then explained her school leader's philosophy on teaching through the standards:

> We've been told this year that we have to teach them what they need to know, and then what we want them to know, and then there's a third component that he called what would be good to know…and to not really focus on those little fun things so much as what they need to know or what they have to know.

Angela whole heartedly enjoyed sharing her love of Poe with students because this afforded her the opportunity to bring meaning to her teaching career as well as experience flow. While focusing on teaching students what they have to know is a part of the job, if given the opportunity to lead a school, Angela committed to creating similar satisfactory experiences for her colleagues by offering teachers courses they loved teaching rather than liked teaching.

Lighten the Load. As Angela described the difficulty in finding balance this year with newly added pressure from her school leader, she also discussed the need for additional teaching support from school leaders. In her specific case, she shared that course teaching allocations were uneven throughout the school building. She primarily expressed concern for teachers with heavier class loads than others at some point as unbalanced as eight courses to three courses between some teachers in the same department. Angela stated she "did not have too much issue with the uneven course

load." Instead, Angela discussed the discord that occurred within the school environment as it did not "set well with some teachers" especially when considering the average class size of 32 students.

Internalization to Initiation. Angela shared one phrase to summarize her latest academic year: "Spirit breaking." In years past, she said her school was great, evidenced by the opportunity to teach material she thoroughly enjoyed, the ability to equally split time between work and time to herself; rather this year was drastically different. What started as a miscommunication between her and her school leader led to a year filled with "intense pressures," so much so that Angela was admitted to the emergency room. With the sudden increase in pressure from her school leader Angela felt as though she was "the whipping child" which created an easy opportunity for her school leader to push her out of education with over 25 years teaching experience and an advanced degree. For her, the school environment she once enjoyed became an environment laced with massive stress eventually leading to a mistrusting attitude towards her school leader when it came to her position within the school.

As she felt the school environment's negative impact grow around her, Angela made a decision for herself around Christmas break. She decided her circumstances would not get the best of her. The improvement plan would eventually end, and "I did not let it beat me down… I've gotten stronger," said Angela. The choice to reach out to colleagues for emotional and professional support was "very helpful" for Angela. She was very conscious of how she would allow the negativity in the school environment and surrounding pressures affect her. Despite characterizing the school year as "spirit-

breaking" she used the conditions of the school environment to lean on colleagues and become a more emotionally resilient person and a stronger educator. In addition to emotional support, Angela found new ways to develop herself professionally by registering for various technology based professional development courses.

Discussion

In the following section, I will discuss the findings in relation to prior scholarship and the study's conceptual framework. Based on the practices of each participant's school leader, I was able to further elaborate on how school leader practices explained levels of teacher mental health by way of school environment conditions. Of note, the appendix of this paper provides an overview of identified school leader practices that advantageously or disadvantageously developed the school environment as well as the practices that contributed to the study's findings.

Environment Shaping Practices

Across the four cases, school leaders enacted the seven practices found in the conceptual framework seen in Figure 1 to varying degrees. With the variation between school leaders' practice, teacher participants perceived their school environments as positive or negative to varying degrees as well. Despite their differing perceptions, all teacher participants connected their school leaders' practice to their experience of and within the school environment.

To begin, Helena's school leader conveyed that he valued the school environment by monitoring and intervening when he felt as though staff morale was declining. This awareness is a key principle in how to cultivate a positive school environment (Velasco et

al., 2012). Helena's school leader worked to create a positive school environment through his actions and beliefs as the head of the school. Her school leaders' actions were further carried out into the school environment as evidenced by the way Helena and her colleagues performed as leaders themselves within the school environment having shown they embraced a collective leadership model (Hoy & Clover, 1986).

As a practice, building relationships was present in all four cases either in reference to a current or former school leaders' practice. School leaders forming a relationship with staff and students was one of the most impactful practices throughout all the cases. How a school leader initiated relationship building with staff members, among staff members, and with students greatly affected how teacher participants viewed the social dimension of their school environment in warmth, inclusivity, and favorability (Richards et al., 2018).

A part of building relationships with people is learning who they are as an individual. Relationships between school community members helps to establish trust because as the relationship develops, a learning process occurs where each member learns one another's preferences, strengths, and needs. With regard to school leaders, relationships increase the ability to exercise individual teacher consideration (Kelley et al., 2005). In the case of Helena, her school leader was able to build strong, trusting relationships with his staff members. Tschannen-Moran and Gareis (2016) reported school leaders that exhibit collegial leadership behaviors were strongly related to faculty trust in the school leader. As a leader with strong relationships, Helena's school leader

knew the professional needs and interests of his teachers further building trust between them and in the school environment.

Helena's school leaders applied instructional leadership principles, in conjunction with distributed leadership, to develop stronger teachers as well as a positive school environment similar to school leaders in Bellibus and Liu (2018). Helena's school leaders were in classrooms often providing Helena and her colleagues with constructive feedback. In alignment with Frase (2001), Helena and her colleagues experienced high levels of self-efficacy and efficacy in the evaluation and development process. As her school leaders were frequently present in the classroom, Helena and her colleagues were comfortable with their presence unlike Angela, Lauren, and Elaina. Elaina described classroom observations by her school leader as weapons. Moreover, Angela and Lauren saw their school leaders in the classrooms so infrequently, they expressed feelings of guilt or the "gotcha" feeling when a school leader did observe their classroom instruction. These negative feelings experienced by Elaina, Lauren, and Angela demonstrated a level of distrust in their school leader as well as misplaced feelings towards how their school leader engaged in instructional leadership.

In addition to constructive feedback, Helena's school leaders offered professional and leadership development opportunities helping to empower staff at Helena's school (Harris & Kemp Graham, 2017; Rhodes et al., 2009). Helena's school leaders were intentional in how they suggested development opportunities to teachers. When discussing teacher development in her school, Elaina was frustrated with how her school leader was unable to provide relevant development for teachers. She thought her school

leader was bound by improving test scores, which left all development to be overgeneralized and focused on testing rather than developing teachers as individuals. Like Basom and Frase (2004) development at Elaina's school did not afford her the opportunity to find motivation or satisfaction whereas Helena's development did. Helena felt she was in a position to grow as an education with each passing year. (Harris & Kemp-Graham, 2017).

As Helena's school leaders provided teachers with resources and opportunities to collaborate, there was a great deal of effort by Helena and her colleagues to implement new teaching strategies in the classroom and throughout the school as a result (Blase & Blase, 1999; Thuan, 2019). Teachers in the study, in particular Lauren and Helena, introduced new initiatives into their schools. A process which required both participants to critically think about the needs of their school and generate new solutions to address these needs known as intellection stimulation. The experiences of Lauren and Helena align with findings of McCarley et al. (2016) where intellectual stimulation led to increased teacher engagement. Both Lauren and Helena were highly engaged as they arranged the deployment logistics of their first year teacher program and house system respectively.

Although Lauren's case presented a positive aspect, her case and school environment also aligned with the negative associations found in the McCarley et al. (2016) study. Lauren's school leader's practice of limiting teacher input lowered teachers' perceptions of the school environment and led teachers to disengage in school processes (McCarley et al., 2016). Moreover, Lauren and her colleagues were frustrated

by their leader's restrictive practice (McCarley et al., 2016). Despite having approval to start her first year teacher program, Lauren and her colleagues were accustomed to being prohibited from offering new ideas for the school which led to an overall negative perception of their school environment.

Explaining Teacher Mental Health

As the aforementioned practices undergird how the school environment is perceived by teachers, the findings—the little things, alignment and balance, lighten the load, and internalization to initiation—were all found to expound on the ways in which school leaders' practice, in combination with the school environment, explain reported levels of mental health in the study's four teacher participants. While the conceptual framework is anchored in prior scholarship, these explanatory findings, build on the study's framework and contribute to our understanding of how teacher's define mental health as well as how the relationship between the three constructs coexist to affect one another.

The finding, "The Little Things" is an inclusive phrase for practices and behaviors enacted by school leaders to create positive school environments for teachers. These acts attend to the person at the center of the teaching force (Kelley et al., 2005). All four teacher participants spoke to the importance of school leaders doing, "the little things" as positive contributions to both their mental health and the school environment. The little things were described as small acts by the school leader that reinforced the human nature of the teaching profession. When school leaders performed these small acts it conveyed a message to teachers that their school leader understood and recognized: (a) the personal

responsibilities teachers maintained outside of teaching, (b) teachers were and are respected professionally and personally, and (c) their leader prioritized keeping people at the center of their work. A school leader that enacted "the little things" sparked satisfaction, gratefulness, value, and trust for teachers (Kelley et al., 2005).

The finding, "Alignment and Balance" articulates each teacher's definition of mental health. Although each teacher defined mental health differently, consistent tenets permeated through each definition in two ways. First, participants believed teacher mental health was achieved when a teacher, including themselves, fulfilled their purpose. Satisfying one's purpose resembles the element meaning in Seligman's (2011) theory of well-being. Second, like WHO's (2005) mental health definition, all teachers spoke about the need to cope from work related stressors in a healthy manner. They often pointed to striking a balance between their personal and professional lives as well as engaging support systems to manage the stress as coping strategies.

Alignment and balance also extends to an agreement of educational, professional, and personal values each teacher held in relation to their definition of teacher mental health. In both Elaina and Angela's cases, balance represented equality between their lives professionally and personally. When their professional responsibilities increasingly encroached on their personal time away from school this created an imbalance between lives, causing emotional and physical distress for both participants (Buchanan, 2010). Given that each participant defined teacher mental health differently, the variation influenced the way in which teachers assessed their school environment. Meaning, teachers were more critical of school environment dimensions and their school leader's

practices in areas in which they valued or saw as factors that directly contributed to their mental health. The finding alignment and balance is an example of teachers influencing the school environment as the relationship is bi-directional (Hoy, 1990). While the influence is not a physical act contributing to the school environment's development, it is a held belief, their definition of what mental health is, that affects how the school environment is perceived and consequently assessed.

As school leaders' practice directly and indirectly influences teacher mental health, the finding lighten the load, reflects the direct pathway to teacher mental health as seen in Figure 1. Because teachers sought balance between their personal and professional lives, school leaders that did manage to lighten the load for teachers showed their support in varying capacities. School leader support is primarily shown in terms of growth and development, resource availability, classroom discipline assistance, and communication of school procedures. A vivid example differentiating the finding lighten the load in practice was seen between Elaina and Helena's cases in how their school leaders communicated the significance of testing. Helena's school leader worked to keep the school environment calm about testing whereas Elaina's school leader created a very stressful environment. Helena's school leaders were able to reverse the negative impact of statewide testing had on the school by establishing an environment that used testing results as a tool for improvement rather than a measurement of teacher or student value (von der Embse et al., 2016). Helena's school leaders' reliance on testing to mark their academic progress ultimately shifted the testing mentality, making it much lighter for the school community in comparison to Elaina's. While testing is an unavoidable mandate in

teaching, how the school leaders espouse the scores and practices surrounding testing is critical in the development of the school environment, as highly stressful environments influence teachers in a maladaptive way (McLean & Connor, 2015).

What differed for each of the four teacher participants as they all experienced worked related stressors was how their school leader was able to mitigate their demands, or lighten the load, of stressors placed on teachers. The leaders at Helena's school frequently found opportunities to care for their teachers by helping to ease the burden of the profession in contrast to the school leaders for Elaina, Lauren, and Angela. The finding lighten the load expressed a need for support from school leaders whether in discipline, testing, management policies, or courses taught.

Internalization to initiation is a response process by teachers as a result of the school environment and likely a response to school leaders who may not be performing practices that impact overall perceptions of the school environment such as lightening the load or the little things. The finding internalization to initiation is where the bi-directionality truly emerges between the school environment and teacher mental health. Each participant described a time they internalized a trait of or an event within the school environment. The experience of internalization, either positive or negative, incited a response from within the participants to initiate an emotionally regulatory act. This act may have been a mechanism to cope, generate positivity or additional positivity, or remove themselves from the environment completely through early retirement. Lauren and Helena chose to begin new programs at their school while Angela reached out for support from colleagues and professional development workshops. Unlike the other

participants, Elaina decided retirement was her best course of action. Her exodus from the school environment is further reflected in the conceptual framework in teacher intentions to move (Borman & Dowling, 2008), which pushes the argument forward that prolonged exposure to negative school environments lead to a decrease in teacher mental health and increase in likelihood of teacher departures.

Implications and Conclusion

The findings of this research study contributes to a growing body of literature that underscores the importance of school leader practices influencing the quality of the school environment as well as the effects school leader practices have on teacher affect. Teacher participants in the study perceived their school environment as either positive or negative, and with that perception their reported levels of well-being and or distress were highly associated with the characterization of their environment. Furthermore, teacher participants clearly associated school leader practices with how they perceived their respective school environment thereby categorizing these practices as advantageous or disadvantageous to the environment's development.

Altogether, teachers upheld different values on school leader practices and dimensions of the school environment based on their own definition of mental health. This suggests, as individuals, teachers operationalize mental health and mental health maintenance differently and are more cognizant of elements within their school environment as it relates to their understanding of mental health in their own life. Despite varying definitions of teacher mental health, all four teacher participants recognized the influence the school environment had on their well-being and distress. Additionally, all

four teachers believed that in order for school leaders to build positive school environments that benefit all community members, school leaders must keep people at the center of their work, remembering teachers are human beings first.

Implications for school leaders can be gleaned from this research. As stated, teachers and students need to be a central focus of the school leader's work. Whether or not a school leader chooses to build optimal school environments, they will ultimately benefit from aligning their practice around a people-first mindset. Teachers are looking to be a part of a community of people, that includes being a vital member that contributes, is respected, trusted, and valued. As Devos and Bouckenooghe (2009) suggested, people-minded school leaders inherently build positive school environments because their work is respectful of the needs and concerns of others. Additionally, school leaders that intentionally cultivate positive school environments are more likely to receive significant returns on investments in increased teacher satisfaction and motivation, a strengthened instructional environment, and higher rates of school effectiveness.

This research also yields implications for teachers. As the current research suggests, teachers value dimensions of the school environment differently, it is therefore recommended that teachers reflect on what in their school environment contributes most to their overall well-being. Likewise, teachers should remain aware of what detracts from their well-being or increases feelings of distress in the school environment. Understanding these factors will likely support teachers fashioning their own pathways to well-being. This could mean reaching out to colleagues for support or collaboration or starting school programming that increases experiences of flow or meaning. By teachers

engaging in reflexivity in the school environment they can also advocate for personal needs as well as the needs of colleagues and students.

While this study contributes to research on school environments and school leader practices, it is one of a few studies in the United States to jointly examine teacher mental health from a holistic PERMA model perspective. As such, there are a few directions for future research. Future research could investigate teacher intellectual stimulation more closely. Few studies are presently available to study this concept with regard to school leaders and teachers as most research on adult intellectual stimulation is found in business or applied psychology research. Moreover, additional research is needed to understand the relationship between school leadership practice, the school environment, and teacher mental health. In particular, an examination into the bi-directional nature of the relationship and its effects on the school leader.

This study sought to answer the questions: (a) How do the practices of school leaders shape teachers' perceptions of the school environment?; and (b) How do the practices of school leaders, related to the school environment, explain reported levels of teacher mental health? Using an explanatory sequential research design I was able to determine there is a significant positive relationship between the school environment and teacher well-being as well as a negative relationship between the school environment and teacher distress in an earlier phase of this study. In this phase of the study, integrating qualitative data and analysis, I found it is critical that school leaders hold people at the center of their practice in order to increase aspects of teacher mental health. It is my belief the findings from this research study will contribute to an under-researched field by

illuminating the susceptibility of teacher mental health to varying characteristics of a school environment. Furthermore, findings will link the practices of the school leader directly to teacher mental health and indirectly by way of the school environment. The findings will also benefit scholars who study teacher mental health and school leaders seeking to create optimal school environments for teachers.

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Table 1

Qualitative Data Cross Analysis

	Elaina Bloom	Lauren Greenleaf
Environment Shaping Practices		
Advantageous	-Practice inclusion with a 'Big Tent' -Build relationships with staff -Showcased depth in professional knowledge -Maintain a positive attitude -Value the school environment -Be a role model for others -Provide constructive feedback	-Maintain high leadership visibility -Build relationships with staff -Celebrate teachers and students
Disadvantageous	-Conduct weaponized observations -Cater to certain groups of teachers -Recommend impersonal professional development -Strictly adhere to mandates	-Discouraged teacher enthusiasm -Little to no teacher input -Limited school leader availability and approachability
Explaining Teacher Mental Health		
The Little Things	-Acknowledge basic human needs -Exercise kindness -Build connections -Avenues to employ coping strategies	-Build relationships with school community -Invest in individual teacher development -Recognize the efforts of teachers
Alignment and Balance	-Find a work-life balance -Tend to life at work when necessary -Align the school environment to mental health (Relationships)	-'And other contractual obligations' -Extended hours and duties to prevent work-life balance -'My time is not your time' -Willing to be flexible in personal time to perform all duties
Lighten the Load	-Increased teacher demands -Student discipline left solely in the hands of teachers -Need for evenly distributed duties -Provide additional support	-Student discipline left solely in the hands of teacher
Internalization to Initiation	-Considered staying in the profession 25 years -Weighed alternative in leadership and school -Felt it was not worth it -Initiated early retirement process	-Leader did not value school environment -Internalized negative environment -Became hyperaware of devoid school environment -Felt negative environment would continue forever -Initiated new first year teacher program

(Continued)

Table 1

(Continued)

	Helena Golden	Dr. Angela Citrine
Environment Shaping Practices		
Advantageous	-Implement collective leadership principles -Take care of people -Provide resource support -Professional development -Welcome teacher innovation -Schedule community 'learning walks' -Intervene when needed	-Some evidence of autonomy
Disadvantageous	-Perpetuating perceived favoritism	-Pressure filled situational condition -Institutional vulnerability
Explaining Teacher Mental Health		
The Little Things	-Accommodating teacher needs -Subtle ways to show appreciation -Prepare for school community needs -Address the whole teacher -Construct a warm school environment	-Hyper focus on administrative management over individual well-being -Limited cognizance of whole person
Alignment and Balance	-Purpose in the work you do -Balance between personal and professional -self -Find a school environment that 'fits' you -Environment that spurs 'best version' of you	-Strong experiences of 'flow' -Engaging and meaningful extracurriculars -Previously found work-life balance
Lighten the Load	-Initial protocol alignment -Release the protocol or mandate to classroom teachers -Distributed carry for efficiency and effectiveness -Not 'burdening' teacher in whole put in part	-Unbalanced course load -Encroachment on time away from work
Internalization to Initiation	-Ron Clarke Academy training -Experienced empowerment from school environment -Collective leadership principles -'No fail culture' established -Initiated: House System	-Placed on improvement plan -'Spirit-breaking' school year -Initiated: Self-development professionally, emotionally, and socially

CHAPTER FIVE

CONCLUSION

Summary of Dissertation

The purpose of my dissertation was to explore teacher mental health in relation to the school environment and school leader practices. In particular, my dissertation's first purpose was to examine empirical research that addressed school leadership practices, the school environment, and teacher mental health simultaneously. During this research examination, it was also my intent to identify practices of school leaders that fashion positive school environments to serve as protective factors for teacher mental health.

To accomplish these tasks of examination and identification, I conducted a systematic literature review across several search phases. In the initial phase I accessed prominent academic search engines to locate potential resources and developed a list of relevant terms on school leadership, the school environment, and teacher mental health. I then conducted a second search phase cross referencing terms to find resources by topic association. After both search phases were completed, I applied an exclusion and inclusion criteria based on the details found in the title and abstract. Finally, the remaining resources were reviewed for content relevance leaving roughly 30 articles for inclusion to develop a literature review that provides an adequate account of scholarship set in the United States addressing teacher mental health from a leadership and school environment lens.

Following the systematic literature review, I used an ecological systems theory approach to perform a correlational investigation into the relationship between the school

environment and teacher mental health (Bronfenbrenner, 1977). I relied on Seligman's (2011) theory of well-being to operationalize teacher mental health throughout the study. Seligman (2011) theorized that five elements contribute to an individual's overall well-being. Together, these five elements: positive emotions, engagement, relationships, meaning, and achievement form the acronym PERMA. The PERMA model attends to one aspect of an individual's overall mental health, of note, Keyes (2005, 2008) and other scholars (e.g. Lamer, 2005; Lyons, 2005; Westerhof & Keyes, 2002) documented there were two dimensions of mental health. To account for the two dimensions, in addition to well-being, I concurrently investigated teacher distress. In the study, distress is considered symptoms of depression, anxiety, and stress. As this portion of my dissertation also focused on the school environment, I drew from Moos's (1973) human environment theory and Hoy's organizational climate theory (1990). In this combination of theories, the school environment's characterization is based on teachers' perception of the school's openness and health. Additionally, the school environment is evaluated by teachers based on three psychosocial dimensions: relationships, personal achievement, and system maintenance.

To assess the school environment, I selected the Revised School-Level Environment Questionnaire (R-SLEQ) as a study instrument. I chose the R-SLEQ for several reasons including its brevity, accuracy, and alignment to study theories. The R-SLEQ was developed by Rentoul and Fraser (1983) and measures five dimensions of the school environment: collaboration, student relationships, resources, decision making, and

innovation. Moreover, each of these five dimensions were grounded in the human environment theory posited by Moos (1973).

I selected two additional surveys to assess teacher mental health: the Workplace PERMA Profiler (WPP) and the Depression Anxiety Stress Scales-21 (DASS-21). The WPP is a 23-question survey that measured respondent well-being centered on the five PERMA elements. This survey was developed by Kern and colleagues (2014) using factor analysis where respondents self-report on an 11-point Likert scale from zero to 10. Each question specifically assesses respondent well-being in relation to their work setting. I selected the DASS-21 to measure teacher distress indicators. The DASS-21 consists of three, 7-item self-report subscales for depression, anxiety, and stress. Respondents self-report on how much a statement applied to them during the school year on a four-point Likert scale from zero to three where zero indicated "did not apply to me at all" and three indicated "applied to me very much or most of the time."

In completing the aforementioned instruments, respondents quantified their perceptions of their school environment conditions as well as their state of mental health. Scores from the R-SLEQ, WPP, and DASS-21 were used as quantitative data and I employed structural equation modeling for data analysis to determine relationships between the school environment and teacher mental health. This portion of my study included 250 volunteer teacher participants from K-12 school settings across the state. Demographically, the participant sample ranged in race, age, gender, teaching experience, educational attainment and certification, as well as teaching level.

The final two purposes of my dissertation were to (a) understand how the practices of school leaders shape the school environment as perceived by teachers and (b) understand how school leader practices that shaped the school environment then explained reported levels of teacher mental health. Following the quantitative study, I purposefully selected four teacher participants from the 250 sample population to participate in the qualitative portion of my dissertation (Yin, 2018). I invited three teacher participants to participate as critical cases as their survey response data aligned with quantitative study hypotheses. I selected a fourth teacher participant to participate as a divergent case whose survey response data was contrary to quantitative hypotheses. I held semi-structured interviews with all four teacher participants via video conferences. In the interview, I addressed participants' definitions of teacher mental health, school leader practices within the context of their respective schools, as well as descriptive details of the school environment.

In all, this dissertation included six research questions:

Systematic Literature Review

1. What is the state of scholarship on teacher mental health in relation to school leader practices and the school environment within the context of United States schools?

Quantitative Study

1. What is the relationship between the school environment and reported teacher well-being?

2. What is the relationship between the school environment and reported teacher distress?
3. What is the relationship between the school environment, reported teacher well-being, and reported teacher distress?

Qualitative Study

1. How do the practices of school leaders shape the school environment as perceived by K-12 teachers?
2. How do the practices of school leaders, related to the school environment, explain reported levels of teacher mental health?

Discussion of Findings

As a collective body of work, my dissertation helps to explicate teacher mental health from multiple avenues. In Chapter 2, I exposed a gap in research on teacher mental health from a United States context. Additionally, in Chapter 2, I established a framework for conceptually visualizing the relationships between school leader practices, the school environment, teacher mental health, student outcomes, and teacher movement. In Chapter 3, I capitalized on the need for additional research and identified significant pathways between the school environment and teacher mental health. In particular, I identified specific dimensions of the school environment that most significantly influence teacher well-being elements and teacher distress indicators. In Chapter 4, I integrated teacher narratives with quantitative survey results to explain how teachers' views of school leader practices both influence the quality of the school environment and their mental health. In

the following section I discuss the findings of my dissertation followed by implications for practice.

Pathways between school leader practices, the school environment and teacher mental health are not inherently mono-directional where school leader practices solely flow through the school environment to teacher mental health. Instead, the relationship pathways between the three constructs (school leader practices, the school environment, and teacher mental health) are bi-directional. At the outset of my dissertation research, I observed this bi-directional relationship in the literature as the nature of the school environment was found to be influential, reflective, and reciprocally influenced (Hoy & Clover, 1986; Hoy & Tarter, 1992; Hoy et al., 2003; Tubbs & Garner, 2008). This means that while school environments influence the behaviors of community members, the school environment is a mirrored reflection of the behaviors and practices community members display, further developing the character of the school environment being experienced. This bi-directionality was documented in the first manuscript and remained present into the third manuscript as teachers discussed their processes for managing their mental health in relation to their school environment.

A second finding of the research uncovered the need for integration in leadership practice from school leaders. As teachers identified practices demonstrated by school leaders that develop the school environment, teacher participants named practices that spanned multiple leadership styles found in literature. Transformational leadership, distributed leadership, elements of servant leadership, and instructional leadership were all leadership styles associated with the individual practices teachers identified as

beneficial. Yet, in looking across the dissertation research each of the leadership styles needed to be integrated in order to effectively impact the overall school environment. This need for leadership style integration was seen in Blase and Blase (1999) as the combination of instructional and distributed leadership and was found to facilitate positive change in school environments. School leaders must understand the context and needs of their particular school environment first before subscribing to a leadership style in full as Hoy (1990) and Pepper and Thomas (2002) emphasized the importance of context when leading a school. While all leadership styles mentioned can and will affect positive change in the school environment, one prescribed method for leadership will not always translate well into every school setting.

A final finding from across the dissertation is that treating staff members as professionals—in building relationships and showing respect—is critical in cultivating positive, affirming school environments. How teachers are treated by their school leader affects all factors of teacher mental health both in well-being and distress. This study and prior scholarship underscore the impact bonding with colleagues, school leaders, and students can have on teacher mental health (e. g. Hargreaves, 2000; Hoy et al., 1992; O'Connor, 2008; Spilt et al., 2011). For teachers, relationships increase trust, satisfaction, commitment, and engagement. School leaders enacting these two practices can build strong, positive school environments.

In summation, throughout this research nearly 40 practices were named by participants in connection with how school environments were perceived. As teachers identified 25 advantageous school leader practices, it is of particular note that nearly half

of these positive practices acknowledged the humanistic perspectives of the teaching profession. This is not surprising as Devos and Bouckenooghe (2009) suggested that school leaders who possess a more people minded leadership style maintain a healthier school environment. Among these practices, teacher participants spoke of the importance of school leaders showing respect towards teachers as individuals and professionals, valuing the work teachers perform daily, displaying appreciation for teachers, and caring for the people on staff. While each practice can be exhibited differently, they all tend to the human needs of each teacher (Kelley et al., 2005). Outside of people-minded practices, other integral practices for school leaders to perform include encouraging continuous teacher development, providing necessary resources, affording teachers classroom autonomy, welcoming teacher voices, and being a supportive leader. With these practices in mind, school leaders would be well positioned to create inclusive, respective, and positive school environments.

Implications for Practice

As a result of this study, implications for practice can be yielded for school leaders and district leaders. First, as the title suggests, an essential task for school leaders would be to lead by valuing their role as the head of the school. More specifically, school leaders need to lead the school in a way that the environment can be an effective entity for students academically and teachers professionally. Second to leading the school and its community members, school leaders should lead in a way that is respective, considerate, and accounts for the whole person. In doing so, school leaders can operate

from a place that is people oriented whereby they take into consideration the needs of their school community members and act accordingly.

Addressing the needs of the school and its members as a leader builds trust within the school environment. School leaders who offer environments that respect teachers help to develop them into teacher-leaders and strong educators, which in turn creates the necessary conditions within the school environment to positively influence teacher mental health. School leaders who establish positive school environments raise teacher satisfaction and commitment to the school, therefore establishing environments where teachers would like to continue teaching at as opposed to moving school sites or leaving the profession.

District leaders could use these findings as a way to evaluate school leader placement. As the school environment bears many implications to student achievement and teacher movement, district leaders could consult these findings to place school leaders in their buildings with the most need. Intentionality in school leader placement allows selected school leaders to marshal a campaign towards school improvement with regard to school environment conditions, teacher retention, and student achievement.

Recommendations for Future Research

Similar to scholarship conducted prior to this research, the findings of my dissertation not only build upon previous research that predates it, but it also provides opportunities for future research. In the case of my dissertation findings, research in the future could focus on the school leader, school level factors that lead to teacher distress, and the moderating role of teacher well-being between the school environment and

teacher distress. The following section briefly describes future areas of research in the field with potential research questions.

As scholarship featured in Chapter 2 demonstrated, there is a bi-directional relationship between the school environment and those within that environment, future research could investigate the relationship between the school leader and the school environment. Prior research outlined that the school environment is both influenced by its members as well as influential to its members. As the research in my dissertation examined the influences the school environment had on teacher mental health, it is worth examining influences of the school environment on school leader mental health.

School leaders' practice, behaviors, and policies do in fact shape the characterization and nature of the school environment. Given that the relationship is bidirectional, one can suppose the school environment also influences the school leader in affect, decision making, and their adopted leadership style. With regard to school leader affect, educational researchers interested in school environment effects on school leader mental health could design a quantitative research study posing the following research question: What is the relationship between the school environment and school leader mental health?

Additionally, as a result of my dissertation, researchers could investigate the relationship between styles of school leadership and perceptions of the school environment. In particular, future researchers could determine whether certain leadership styles increase teachers' perceptions of the school environment in positivity, openness, and healthiness. In Chapter 4 I detailed how teachers associate school leadership practice

to the development and nature of the school environment, therefore, future researchers could employ a mixed methods approach to this investigation by integrating quantitative leadership data from a leadership scale and school environment data to understand how school leaders decide which leadership style to adopt and how that choice facilitates school environment development.

I found school resources were negatively associated with all three indicators of teacher distress: depression, anxiety, and stress. Meaning, teacher distress is likely to increase as access to school resources decreases. Although significant, negative relationships between resources and distress indicators were identified, the identification falls short of addressing why the relationship is negative. This is an example of how qualitative research can expound on quantitative results. Future researcher could expand upon the quantitative findings with a qualitative study to understand teachers' experiences of distress in relationship to the availability of school resources. Research questions related to this idea include:

1) What are the repercussions of school resource scarcity on teachers' experiences of distress?
2) How do teachers experiencing distress navigate, overcome, and find success in under-funded schools?

I observed that teacher well-being served as a moderator between the school environment and teacher distress. A teacher's reported level of well-being affected the school environment's strength over their level of distress. Essentially, teacher well-being weakened school environment influences on their experiences of depression, anxiety, and

or stress. As this result came with a note of caution, due to the mixed results of model fit, future research could be replicated with minor adjustments to strengthen model fit. One suggestion would be to increase the future study's sample size. Another suggestion for future research would be to add a qualitative component to identify coping strategies teachers engage to lower experiences of distress and determine if teachers draw from their well-being to cope.

Conclusion

Teachers can become members of schools that enrich them as individuals and professionals. Students can attend schools that nurture them intellectually and social-emotionally. School leaders can cultivate schools with environments that benefit all within its community. The development of the school environment, in large part, rests in the practices of the school leader, and with that developmental responsibility, implications for teacher affect, teacher movement, and student achievement all hang in the balance. Together, these three manuscripts contribute to our understanding of the relationships—from the macro to micro levels—between the school leader's practice, the school environment, and teacher mental health. More specifically, this research adds to our understanding of which school leader practices fashion positively perceived school environments. Furthermore, this research extends our understanding of how the school environment can be used as a mechanism to improve teacher mental health with direct identification of school environment dimensions that influence teacher mental health most.

In conclusion, it is my hope this study contributes to the practice of school leaders working to create optimal school environments for teacher and students. Although the inception of this research study began with teacher departures from the profession in search of rest and well-being, I remain hopeful the findings can support school leaders in crafting schools that keep people at the core thereby developing environments well suited to keep teachers in the profession.

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APPENDICES

Appendix A

Workplace PERMA Profiler

Please respond to the question by indicating 0 to 10; 0 being never/not at all and 10 being always/completely.

	0	1	2	3	4	5	6	7	8	9	10
To what extent is your work purposeful and meaningful?											
How often do you feel you are making progress towards accomplishing your work-related goals?											
At work, how often do you become absorbed in what you are doing?											
In general, how would you say your health is?											
At work, how often do you feel joyful?											
To what extent do you receive help and support from co-workers when you need it?											
At work, how often do you feel anxious?											
How often do you achieve the important work goals you set for yourself?											
In general, to what extent do you feel that what you do at work is valuable and worthwhile?											
At work, how often do you feel positive?											
To what extent do you feel excited and interested in your work?											
How lonely do you feel at work?											
How satisfied are you with your current physical health?											
At work, how often do you feel angry?											
To what extent to do you feel appreciated by your co-workers?											
How often are you able to handle your work-related responsibilities?											
To what extent do you generally feel that you have a sense of direction in your work?											

Compared to others of your same age and gender, how is your health?											
How satisfied are you with your professional relationships?											
At work, how often do you feel sad?											
At work, how often do you lose track of time while doing something you enjoy?											
At work, to what extent do you feel contented?											
Taking all things together, how happy would you say you are with your work?											

Appendix B

Revised School-Level Environment Questionnaire

Please indicate your level of agreement or disagreement with each of the following statements about your current school environment.

SD-Strong disagree
D- Disagree
N- Neutral
A- Agree
SA- Strongly Agree

		SD	D	N	A	SA
1.	Teachers design instructional programs together.					
2.	Most students are well mannered or respectful of the school staff.					
3.	Instructional equipment is not consistently available.					
4.	Teachers are frequently asked to participate in decisions.					
5.	New and different ideas are always being tried out.					
6.	There is good communication among teachers.					
7.	Most students are helpful and cooperative with teachers.					
8.	The school library has sufficient resources and materials.					
9.	Decisions about the school are made by the principal.					
10.	New courses or curriculum materials are seldom implemented.					
11.	I have regular opportunities to work with other teachers.					
12.	Students in the school are well-behaved.					
13.	Digital equipment, computers, and Internet access are readily available.					
14.	I have very little say in the running of the school.					
15.	We are willing to try new teaching approaches in my school.					
16.	I seldom discuss the needs of individual students with other teachers.					
17.	Most students are motivated to learn.					
18.	The supply of equipment and resources is **not** adequate.					
19.	Teachers in this school are innovative.					
20.	Classroom instruction is rarely coordinated across teachers.					
21.	Good teamwork is **not** emphasized enough at my school.					

Appendix C

Depression Anxiety Stress Scales-21

Please read each statement and mark a number 0, 1, 2, or 3 which indicate how much the statement applies to you over the present school year. There are no right or wrong answers. Do not spend too much time on any statement.

0- Did not apply to me at all
1- Applied to me to some degree or some of the time
2- Applied to me a considerable degree or a good part of the time
3- Applied to me very much or most of the time

		0	1	2	3
1.	I found it hard to wind down.				
2.	I was aware of dryness of my mouth.				
3.	I couldn't seem to experience any positive feeling at all.				
4.	I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness, in the absence of physical exertion).				
5.	I found it difficult to work up the initiative to do things.				
6.	I tended to over-react to situations.				
7.	I experienced trembling (e.g., in the hands).				
8.	I felt that I was using a lot of nervous energy.				
9.	I felt worried about situations in which I might panic and make a fool of myself.				
10.	I felt I had nothing to look forward to.				
11.	I found myself getting agitated.				
12.	I found it difficult to relax.				
13.	I felt down-hearted and blue.				
14.	I was intolerant of anything that kept me from getting on with what I was doing.				
15.	I felt I was close to panic.				
16.	I was unable to become enthusiastic about anything.				
17.	I felt that I wasn't worth much as a person.				
18.	I felt that I was rather touchy.				
19.	I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat).				
20.	I felt scared without good reason.				
21.	I felt that life was meaningless.				

Appendix D

Interview Protocol

Opening: Hello, [self-introduction]. I am a doctoral candidate at Clemson University. Thank you very much for your willingness to participate in my study. I have invited you to participate in this portion of the study because of your role as a teacher at this school. The interview will last approximately 60 minutes, and with your permission, will be recorded to ensure I accurately capture our time together in conversation.

It is important to me to ensure you feel comfortable sharing your experiences; for that reason I will not include any information in my study that can be used to identify you. I have provided an informed consent document that gives you more details on your involvement and how I will use and protect your information. [Hand out informed consent, give time for participant to read, and answer questions. Sign and collect forms for participants who would like to participate.]

Introduction

1. Tell me about yourself. What should I know about you as a person?
   Prompt: As an educator?
2. What led you to the teaching profession?
3. How long have you been teaching at your school?

Transition

4. How would you describe the environment of your school to someone that is new?
5. Does your school celebrate achievements? How so?
   a. Individually?
   b. School-wide?
6. What does teacher mental health and well-being mean to you?
7. Tell me about the relationships you have been able to form at this school.
   Prompt: How were those relationships initiated?

Key

8. Earlier you described the school environment to me, what does your school leader do to create the school environment you described?
9. How does your school leader build relationships with members of the school community?
   Prompt: You in particular?
   (In case of a negative response) What would you like to see your school leader do to build relationships within the school community?
10. Tell me what your school leader does to develop faculty members.

Follow up: What does you school leader do to develop you as an educator?

11. How does your school leader communicate school procedures to members of the school community?
    a. Students
    b. Parents
    c. Teachers
12. When introducing new ideas or initiatives, does your school leader include faculty members?
    a. Prompt: Could you provide an example of how faculty members are included?
13. Do you feel your school leader works to promote teacher engagement within the school environment?
    Prompt: What does your school leader do to promote teacher engagement?
    Follow up: Could you describe a time when you lost track of time doing something at school?
14. Tell me about something within the school environment that brought you joy or satisfaction?
    Follow up: What about something that brought you meaning or fulfillment?
15. [Insert individual statistic based on teacher survey responses] How does your school environment affect the level of well-being you reported on the surveys?

Closing

16. You wake up tomorrow and the school environment is exactly how you would imagine it should be, could you describe what that particular school environment is like?
17. If you were to become the school leader for a day, what would you do to make this school environment like the one you just imagined and described?

Thank you so much for your time. Those are all of the questions I have for you; is there anything else I should have asked you or you think I should know? Do you have any questions for me? If you have questions or information you want to share later, please follow up with me. [Hand out business cards.]

Appendix E

Positionality Statement

My time as a school counselor tremendously impacted my desire to research school environments. With the position came access to people and conversations where others were not privy. In my case, I sat on my school's leadership team along with my school leaders, instructional coach, co-counselor and school psychologist. I was present for hard conversations about school programming, instruction, and the essence of our school environment. On district surveys, our school continuously ranked last in morale. Our teachers were discouraged by this, our school leader knew, however in our leadership meeting she verbally washed her hands of the matter. To help our teachers and students; my co-counselor, school psychologist, and I would try new initiatives to boost the spirit of the school community. Despite a handful of promising starts, no matter how hard we tried as a band of three, our attempts to revitalize the school environment were thwarted due to a lack of consistency on our school leader's part. The school environment would momentarily show signs of improvement, our school leader took note, then before we knew it our school was headed in a different direction again.

After four years of increased teacher frustration, teacher departures, and an unchanged school environment, my thoughts of an energized school became more of an elusive idea, a vision for future schools, rather than a reality that could be attained in the present. That was until I gained a mentor in another school leader in the district. On the district survey her school ranked first in morale. Once, her school's satisfaction rating by teachers was 98%. Rather than resting comfortably at 98%, she asked herself, "What do I

need to do to get to 100%?" My mentor was not asking from a place of personal pride or superiority, she was asking from a place that puts her staff first because she wanted her staff to feel 100% satisfied with their school. Having seen both ends of the school morale spectrum with my school leader and mentor, I believed school leadership had the greatest influence on the characterization of the school environment.

In my search for a fourth dissertation advisory committee member, as a doctoral student, my perspective on my relationship to my research changed. Before the conversation with a prospective committee member my relationship to my research seemed distant, at an arm's length, where I was engineering a masterful research agenda away from the chaotic topic I was studying. I focused on the outreach of my research as my viewpoint was always distant. In my agenda, I sought further confirmation that these idyllic school environments that I daydreamed about as a fifth and sixth year school counselor did indeed bountifully exist and I was willing to travel any distance to find them. I envisioned putting forth an outline of practices school leaders could implement in their work to actualize an abundance of positive school environments across the United States so that they were standards of operation and no longer a rarity or hidden gems.

During our conversation in a central campus coffee shop, the purpose and life of my research came full circle. At the time his words struck me as odd when he exclaimed, "This is wonderful, I am so glad you do not have an axe to grind with your research." Puzzled, I wondered, "Who would have an axe to grind in research?" Given that I once experienced a school environment with extremely low morale, little action by my school leader to improve the conditions, and had several colleagues confide in me about the

effect the school environment had on their physical and mental health; it dawned on me that I lived through my research. The revelation made my ability to remain distant and out of the chaos impossible. Instead of setting out to weaponize research in a way that degrades school leaders and their practice based on my own experiences, I am optimistic that my research can become a tool for school leaders on how to do the work of building positive school environments. Moreover, I hope my research becomes a call to action to truly invest resources—in people, training, and time—into sustainably creating exceptional school environments for all.